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FIG. 1

```
SEQRES   1 A  297  MET ALA LEU ALA PRO ASN GLN ALA LEU LEU ARG ILE LEU
SEQRES   2 A  297  LYS GLU THR GLU PHE LYS LYS ILE LYS VAL LEU GLY SER
SEQRES   3 A  297  GLY ALA PHE GLY THR VAL TYR LYS GLY LEU TRP ILE PRO
SEQRES   4 A  297  GLU GLY GLU LYS VAL LYS ILE PRO VAL ALA ILE LYS GLU
SEQRES   5 A  297  LEU ARG GLU ALA THR SER PRO LYS ALA ASN LYS GLU ILE
SEQRES   6 A  297  LEU ASP GLU ALA TYR VAL MET ALA SER VAL ASP ASN PRO
SEQRES   7 A  297  HIS VAL CYS ARG LEU LEU GLY ILE CYS LEU THR SER THR
SEQRES   8 A  297  VAL GLN LEU ILE THR GLN LEU MET PRO PHE GLY CYS LEU
SEQRES   9 A  297  LEU ASP TYR VAL ARG GLU HIS LYS ASP ASN ILE GLY SER
SEQRES  10 A  297  GLN TYR LEU LEU ASN TRP CYS VAL GLN ILE ALA LYS GLY
SEQRES  11 A  297  MET ASN TYR LEU GLU ASP ARG ARG LEU VAL HIS ARG ASP
SEQRES  12 A  297  LEU ALA ALA ARG ASN VAL LEU VAL LYS THR PRO GLN HIS
SEQRES  13 A  297  VAL LYS ILE THR ASP PHE GLY LEU ALA LYS LEU LEU GLY
SEQRES  14 A  297  ALA GLU GLU LYS GLU TYR HIS ALA GLU GLY GLY LYS VAL
SEQRES  15 A  297  PRO ILE LYS TRP MET ALA LEU GLU SER ILE LEU HIS ARG
SEQRES  16 A  297  ILE TYR THR HIS GLN SER ASP VAL TRP SER TYR GLY VAL
SEQRES  17 A  297  THR VAL TRP GLU LEU MET THR PHE GLY SER LYS PRO TYR
SEQRES  18 A  297  ASP GLY ILE PRO ALA SER GLU ILE SER SER ILE LEU GLU
SEQRES  19 A  297  LYS GLY GLU ARG LEU PRO GLN PRO PRO ILE CYS THR ILE
SEQRES  20 A  297  ASP VAL TYR MET ILE MET VAL LYS CYS TRP MET ILE ASP
SEQRES  21 A  297  ALA ASP SER ARG PRO LYS PHE ARG GLU LEU ILE ILE GLU
SEQRES  22 A  297  PHE SER LYS MET ALA ARG ASP PRO GLN ARG TYR LEU VAL
SEQRES  23 A  297  ILE GLN GLY GLU GLY HIS HIS HIS HIS HIS HIS
```

FIG 2

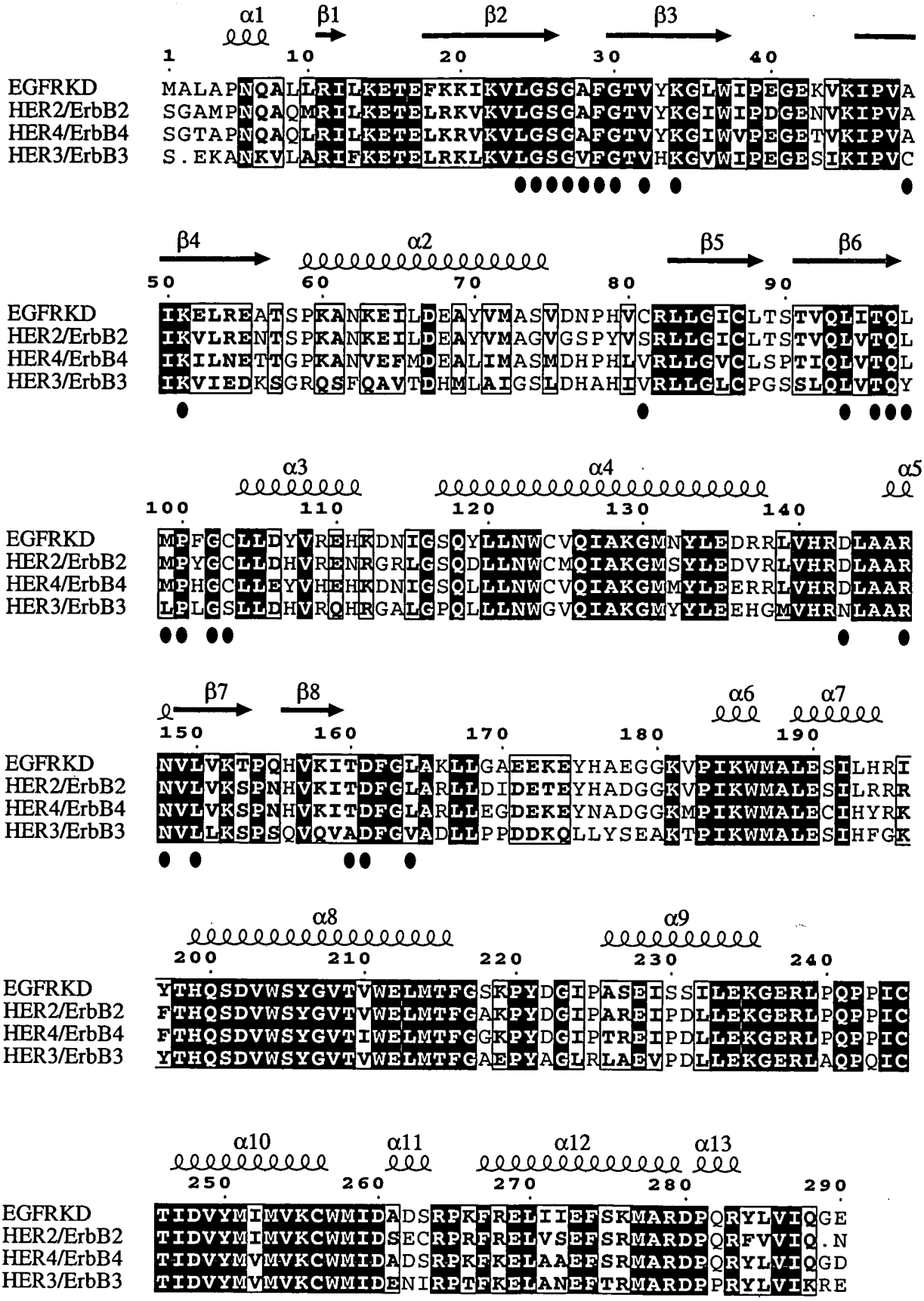
α1 β1 β2 β3
1 10 20 30 40
EGFRKD MALAPNQALLRILKETEFKKIKVLGSGAFGTVYKGLWIPEGEKVKIPVA
HER2/ErbB2 SGAMPNQAQMRILKETELRKVKVLGSGAFGTVYKGIWIPDGENVKIPVA
HER4/ErbB4 SGTAPNQAQLRILKETELKRVKVLGSGAFGTVYKGIWVPEGETVKIPVA
HER3/ErbB3 S.EKANKVLARIFKETELRKLKVLGSGVFGTVHKGVWIPEGESIKIPVC
β4 α2 β5 β6
50 60 70 80 90
EGFRKD IKELREATSPKANKEILDEAYVMASVDNPHVCRLLGICLTSTVQLITQL
HER2/ErbB2 IKVLRENTSPKANKEILDEAYVMAGVGSPYVSRLLGICLTSTVQLVTQL
HER4/ErbB4 IKILNETTGPKANVEFMDEALIMASMDHPHLVRLLGVCLSPTIQLVTQL
HER3/ErbB3 IKVIEDKSGRQSFQAVTDHMLAIGSLDHAHIVRLLGLCPGSSLQLVTQY
α3 α4 α5
100 110 120 130 140
EGFRKD MPFGCLLDYVREHKDNIGSQYLLNWCVQIAKGMNYLEDRRLVHRDLAAR
HER2/ErbB2 MPYGCLLDHVRENRGRLGSQDLLNWCMQIAKGMSYLEDVRLVHRDLAAR
HER4/ErbB4 MPHGCLLEYVHEHKDNIGSQLLLNWCVQIAKGMMYLEERRLVHRDLAAR
HER3/ErbB3 LPLGSLLDHVRQHRGALGPQLLLNWGVQIAKGMYYLEEHGMVHRNLAAR
β7 β8 α6 α7
150 160 170 180 190
EGFRKD NVLVKTPQHVKITDFGLAKLLGAEEKEYHAEGGKVPIKWMALESILHRI
HER2/ErbB2 NVLVKSPNHVKITDFGLARLLDIDETEYHADGGKVPIKWMALESILRRR
HER4/ErbB4 NVLVKSPNHVKITDFGLARLLEGDEKEYNADGGKMPIKWMALECIHYRK
HER3/ErbB3 NVLLKSPSQVQVADFGVADLLPPDDKQLLYSEAKTPIKWMALESIHFGK
α8 α9
200 210 220 230 240
EGFRKD YTHQSDVWSYGVTVWELMTFGSKPYDGIPASEISSILEKGERLPQPPIC
HER2/ErbB2 FTHQSDVWSYGVTVWELMTFGAKPYDGIPAREIPDLLEKGERLPQPPIC
HER4/ErbB4 FTHQSDVWSYGVTIWELMTFGGKPYDGIPTREIPDLLEKGERLPQPPIC
HER3/ErbB3 YTHQSDVWSYGVTVWELMTFGAEPYAGLRLAEVPDLLEKGERLAQPQIC
α10 α11 α12 α13
250 260 270 280 290
EGFRKD TIDVYMIMVKCWMIDADSRPKFRELIIEFSKMARDPQRYLVIQGE
HER2/ErbB2 TIDVYMIMVKCWMIDSECRPRFRELVSEFSRMARDPQRFVVIQ.N
HER4/ErbB4 TIDVYMVMVKCWMIDADSRPKFKELAAEFSRMARDPQRYLVIQGD
HER3/ErbB3 TIDVYMVMVKCWMIDENIRPTFKELANEFTRMARDPPRYLVIKRE

FIG. 3

```
CRYST1   56.926   64.948   80.249  90.00 109.01  90.00 P 1 21 1      2

         Atom
         Type   Residue   #          X       Y       Z       OCC    B          Atom

ATOM      1  N   LEU A   3       25.444 -20.332  25.811  1.00 25.27           N
ATOM      2  CA  LEU A   3       26.210 -21.613  25.815  1.00 25.21           C
ATOM      3  C   LEU A   3       27.671 -21.412  25.400  1.00 25.54           C
ATOM      4  O   LEU A   3       28.579 -21.944  26.039  1.00 25.74           O
ATOM      5  CB  LEU A   3       25.539 -22.635  24.887  1.00 24.95           C
ATOM      6  CG  LEU A   3       24.252 -23.372  25.286  1.00 24.41           C
ATOM      7  CD1 LEU A   3       24.197 -23.711  26.774  1.00 24.32           C
ATOM      8  CD2 LEU A   3       23.016 -22.583  24.867  1.00 24.49           C
ATOM      9  N   ALA A   4       27.881 -20.636  24.337  1.00 25.85           N
ATOM     10  CA  ALA A   4       29.199 -20.461  23.725  1.00 26.19           C
ATOM     11  C   ALA A   4       29.629 -18.986  23.691  1.00 26.48           C
ATOM     12  O   ALA A   4       28.778 -18.099  23.594  1.00 26.73           O
ATOM     13  CB  ALA A   4       29.194 -21.050  22.318  1.00 26.08           C
ATOM     14  N   PRO A   5       30.938 -18.723  23.767  1.00 26.64           N
ATOM     15  CA  PRO A   5       31.456 -17.346  23.793  1.00 26.76           C
ATOM     16  C   PRO A   5       31.029 -16.465  22.616  1.00 26.86           C
ATOM     17  O   PRO A   5       30.950 -15.247  22.792  1.00 26.93           O
ATOM     18  CB  PRO A   5       32.980 -17.536  23.797  1.00 26.73           C
ATOM     19  CG  PRO A   5       33.207 -18.941  23.383  1.00 26.64           C
ATOM     20  CD  PRO A   5       32.025 -19.714  23.861  1.00 26.62           C
ATOM     21  N   ASN A   6       30.754 -17.058  21.455  1.00 27.05           N
ATOM     22  CA  ASN A   6       30.275 -16.302  20.292  1.00 27.18           C
ATOM     23  C   ASN A   6       28.961 -15.555  20.557  1.00 27.20           C
ATOM     24  O   ASN A   6       28.587 -14.645  19.814  1.00 27.41           O
ATOM     25  CB  ASN A   6       30.147 -17.208  19.059  1.00 27.19           C
ATOM     26  CG  ASN A   6       29.133 -18.333  19.247  1.00 27.51           C
ATOM     27  OD1 ASN A   6       28.433 -18.402  20.258  1.00 28.16           O
ATOM     28  ND2 ASN A   6       29.059 -19.227  18.265  1.00 27.50           N
ATOM     29  N   GLN A   7       28.273 -15.953  21.623  1.00 27.18           N
ATOM     30  CA  GLN A   7       27.037 -15.310  22.054  1.00 27.07           C
ATOM     31  C   GLN A   7       27.309 -14.181  23.056  1.00 26.85           C
ATOM     32  O   GLN A   7       26.374 -13.599  23.612  1.00 26.95           O
ATOM     33  CB  GLN A   7       26.085 -16.349  22.661  1.00 27.19           C
ATOM     34  CG  GLN A   7       25.571 -17.396  21.672  1.00 27.57           C
ATOM     35  CD  GLN A   7       24.951 -18.601  22.361  1.00 28.18           C
ATOM     36  OE1 GLN A   7       25.663 -19.453  22.899  1.00 28.63           O
ATOM     37  NE2 GLN A   7       23.626 -18.673  22.349  1.00 27.92           N
ATOM     38  N   ALA A   8       28.589 -13.872  23.274  1.00 26.58           N
ATOM     39  CA  ALA A   8       28.996 -12.883  24.272  1.00 26.34           C
ATOM     40  C   ALA A   8       30.309 -12.153  23.943  1.00 26.18           C
ATOM     41  O   ALA A   8       30.800 -11.358  24.750  1.00 26.16           O
ATOM     42  CB  ALA A   8       29.082 -13.538  25.652  1.00 26.33           C
ATOM     43  N   LEU A   9       30.870 -12.414  22.765  1.00 26.04           N
ATOM     44  CA  LEU A   9       32.142 -11.805  22.372  1.00 25.90           C
ATOM     45  C   LEU A   9       31.969 -10.684  21.351  1.00 25.81           C
ATOM     46  O   LEU A   9       31.094 -10.743  20.486  1.00 25.85           O
ATOM     47  CB  LEU A   9       33.107 -12.865  21.832  1.00 25.92           C
ATOM     48  N   LEU A  10       32.819  -9.667  21.462  1.00 25.74           N
ATOM     49  CA  LEU A  10       32.791  -8.520  20.562  1.00 25.61           C
ATOM     50  C   LEU A  10       33.690  -8.744  19.354  1.00 25.72           C
ATOM     51  O   LEU A  10       34.847  -9.145  19.492  1.00 25.75           O
ATOM     52  CB  LEU A  10       33.211  -7.250  21.308  1.00 25.46           C
ATOM     53  CG  LEU A  10       33.315  -5.936  20.529  1.00 25.17           C
ATOM     54  CD1 LEU A  10       31.940  -5.364  20.214  1.00 24.76           C
ATOM     55  CD2 LEU A  10       34.153  -4.937  21.312  1.00 25.05           C
```

FIG. 4A

```
ATOM     56  N   ARG A  11      33.148  -8.478  18.170  1.00 25.94           N
ATOM     57  CA  ARG A  11      33.905  -8.617  16.936  1.00 26.20           C
ATOM     58  C   ARG A  11      34.537  -7.292  16.521  1.00 26.33           C
ATOM     59  O   ARG A  11      33.848  -6.284  16.358  1.00 26.36           O
ATOM     60  CB  ARG A  11      33.018  -9.173  15.821  1.00 26.25           C
ATOM     61  CG  ARG A  11      33.630 -10.347  15.080  1.00 26.65           C
ATOM     62  CD  ARG A  11      33.347 -11.708  15.706  1.00 26.95           C
ATOM     63  NE  ARG A  11      32.289 -12.422  14.993  1.00 27.57           N
ATOM     64  CZ  ARG A  11      32.464 -13.129  13.879  1.00 27.33           C
ATOM     65  NH1 ARG A  11      31.426 -13.734  13.317  1.00 27.70           N
ATOM     66  NH2 ARG A  11      33.665 -13.235  13.323  1.00 26.62           N
ATOM     67  N   ILE A  12      35.859  -7.301  16.378  1.00 26.56           N
ATOM     68  CA  ILE A  12      36.595  -6.136  15.905  1.00 26.77           C
ATOM     69  C   ILE A  12      36.489  -6.113  14.391  1.00 26.96           C
ATOM     70  O   ILE A  12      36.950  -7.038  13.718  1.00 27.20           O
ATOM     71  N   LEU A  13      35.873  -5.063  13.860  1.00 27.07           N
ATOM     72  CA  LEU A  13      35.599  -4.989  12.431  1.00 27.24           C
ATOM     73  C   LEU A  13      36.569  -4.077  11.689  1.00 27.51           C
ATOM     74  O   LEU A  13      36.891  -2.980  12.157  1.00 27.50           O
ATOM     75  CB  LEU A  13      34.152  -4.543  12.183  1.00 27.16           C
ATOM     76  CG  LEU A  13      32.963  -5.509  12.340  1.00 27.13           C
ATOM     77  CD1 LEU A  13      32.136  -5.548  11.062  1.00 26.77           C
ATOM     78  CD2 LEU A  13      33.355  -6.927  12.757  1.00 27.33           C
ATOM     79  N   LYS A  14      37.042  -4.552  10.538  1.00 27.82           N
ATOM     80  CA  LYS A  14      37.758  -3.715   9.578  1.00 28.13           C
ATOM     81  C   LYS A  14      36.718  -3.087   8.666  1.00 28.13           C
ATOM     82  O   LYS A  14      35.707  -3.715   8.352  1.00 28.15           O
ATOM     83  CB  LYS A  14      38.739  -4.542   8.745  1.00 28.25           C
ATOM     84  CG  LYS A  14      39.971  -5.023   9.497  1.00 28.61           C
ATOM     85  CD  LYS A  14      40.331  -6.444   9.089  1.00 29.24           C
ATOM     86  CE  LYS A  14      41.812  -6.577   8.759  1.00 29.63           C
ATOM     87  NZ  LYS A  14      42.548  -7.356   9.800  1.00 29.62           N
ATOM     88  N   GLU A  15      36.965  -1.854   8.233  1.00 28.25           N
ATOM     89  CA  GLU A  15      35.994  -1.128   7.415  1.00 28.46           C
ATOM     90  C   GLU A  15      35.778  -1.719   6.009  1.00 28.36           C
ATOM     91  O   GLU A  15      34.960  -1.212   5.239  1.00 28.40           O
ATOM     92  CB  GLU A  15      36.304   0.378   7.383  1.00 28.64           C
ATOM     93  CG  GLU A  15      37.457   0.806   6.489  1.00 29.59           C
ATOM     94  CD  GLU A  15      37.431   2.296   6.181  1.00 30.53           C
ATOM     95  OE1 GLU A  15      37.154   3.102   7.100  1.00 30.46           O
ATOM     96  OE2 GLU A  15      37.688   2.667   5.015  1.00 31.29           O
ATOM     97  N   THR A  16      36.501  -2.794   5.696  1.00 28.25           N
ATOM     98  CA  THR A  16      36.305  -3.536   4.449  1.00 28.09           C
ATOM     99  C   THR A  16      35.501  -4.819   4.680  1.00 27.97           C
ATOM    100  O   THR A  16      35.098  -5.490   3.725  1.00 27.77           O
ATOM    101  CB  THR A  16      37.655  -3.871   3.774  1.00 28.10           C
ATOM    102  OG1 THR A  16      38.469  -4.632   4.675  1.00 28.22           O
ATOM    103  CG2 THR A  16      38.472  -2.607   3.520  1.00 28.14           C
ATOM    104  N   GLU A  17      35.273  -5.151   5.949  1.00 27.87           N
ATOM    105  CA  GLU A  17      34.484  -6.326   6.319  1.00 27.81           C
ATOM    106  C   GLU A  17      32.975  -6.059   6.306  1.00 27.66           C
ATOM    107  O   GLU A  17      32.177  -6.995   6.358  1.00 27.72           O
ATOM    108  CB  GLU A  17      34.919  -6.861   7.687  1.00 27.91           C
ATOM    109  CG  GLU A  17      36.190  -7.695   7.647  1.00 28.09           C
ATOM    110  CD  GLU A  17      36.659  -8.119   9.025  1.00 28.50           C
ATOM    111  OE1 GLU A  17      37.107  -7.246   9.797  1.00 28.53           O
ATOM    112  OE2 GLU A  17      36.586  -9.328   9.336  1.00 28.89           O
ATOM    113  N   PHE A  18      32.589  -4.786   6.236  1.00 27.51           N
ATOM    114  CA  PHE A  18      31.176  -4.407   6.185  1.00 27.26           C
ATOM    115  C   PHE A  18      30.905  -3.280   5.191  1.00 27.26           C
```

FIG. 4B

```
ATOM    116  O   PHE A  18      31.786  -2.468   4.898  1.00 27.35           O
ATOM    117  CB  PHE A  18      30.652  -4.039   7.583  1.00 27.13           C
ATOM    118  CG  PHE A  18      31.166  -2.724   8.107  1.00 26.95           C
ATOM    119  CD1 PHE A  18      30.396  -1.569   8.003  1.00 26.76           C
ATOM    120  CE1 PHE A  18      30.866  -0.350   8.488  1.00 26.83           C
ATOM    121  CZ  PHE A  18      32.118  -0.280   9.090  1.00 26.83           C
ATOM    122  CE2 PHE A  18      32.893  -1.429   9.203  1.00 26.91           C
ATOM    123  CD2 PHE A  18      32.415  -2.642   8.717  1.00 26.86           C
ATOM    124  N   LYS A  19      29.673  -3.241   4.686  1.00 27.10           N
ATOM    125  CA  LYS A  19      29.239  -2.217   3.744  1.00 26.92           C
ATOM    126  C   LYS A  19      27.835  -1.714   4.089  1.00 26.82           C
ATOM    127  O   LYS A  19      26.937  -2.511   4.380  1.00 26.80           O
ATOM    128  CB  LYS A  19      29.271  -2.769   2.316  1.00 26.91           C
ATOM    129  CG  LYS A  19      29.342  -1.706   1.232  1.00 27.23           C
ATOM    130  N   LYS A  20      27.662  -0.393   4.059  1.00 26.60           N
ATOM    131  CA  LYS A  20      26.364   0.240   4.291  1.00 26.42           C
ATOM    132  C   LYS A  20      25.620   0.389   2.969  1.00 26.34           C
ATOM    133  O   LYS A  20      26.113   1.040   2.045  1.00 26.28           O
ATOM    134  CB  LYS A  20      26.533   1.616   4.947  1.00 26.39           C
ATOM    135  CG  LYS A  20      27.216   1.596   6.311  1.00 26.56           C
ATOM    136  CD  LYS A  20      27.464   3.005   6.844  1.00 26.29           C
ATOM    137  CE  LYS A  20      28.684   3.660   6.206  1.00 26.38           C
ATOM    138  NZ  LYS A  20      29.963   3.012   6.612  1.00 26.50           N
ATOM    139  N   ILE A  21      24.436  -0.215   2.881  1.00 26.31           N
ATOM    140  CA  ILE A  21      23.650  -0.180   1.649  1.00 26.28           C
ATOM    141  C   ILE A  21      22.658   0.987   1.624  1.00 26.44           C
ATOM    142  O   ILE A  21      22.652   1.763   0.673  1.00 26.65           O
ATOM    143  CB  ILE A  21      22.970  -1.552   1.368  1.00 26.22           C
ATOM    144  CG1 ILE A  21      24.001  -2.556   0.857  1.00 26.16           C
ATOM    145  CD1 ILE A  21      24.390  -3.591   1.868  1.00 26.80           C
ATOM    146  CG2 ILE A  21      21.860  -1.428   0.332  1.00 26.00           C
ATOM    147  N   LYS A  22      21.832   1.116   2.661  1.00 26.52           N
ATOM    148  CA  LYS A  22      20.870   2.219   2.724  1.00 26.71           C
ATOM    149  C   LYS A  22      20.505   2.636   4.149  1.00 26.80           C
ATOM    150  O   LYS A  22      20.413   1.801   5.051  1.00 26.76           O
ATOM    151  CB  LYS A  22      19.607   1.910   1.906  1.00 26.76           C
ATOM    152  CG  LYS A  22      18.932   0.587   2.232  1.00 27.25           C
ATOM    153  CD  LYS A  22      17.460   0.785   2.544  1.00 27.75           C
ATOM    154  CE  LYS A  22      16.585   0.496   1.331  1.00 27.67           C
ATOM    155  NZ  LYS A  22      16.435   1.690   0.455  1.00 27.22           N
ATOM    156  N   VAL A  23      20.298   3.939   4.327  1.00 26.71           N
ATOM    157  CA  VAL A  23      19.968   4.522   5.625  1.00 26.86           C
ATOM    158  C   VAL A  23      18.538   4.178   6.056  1.00 26.96           C
ATOM    159  O   VAL A  23      17.597   4.294   5.269  1.00 27.12           O
ATOM    160  CB  VAL A  23      20.220   6.073   5.640  1.00 26.92           C
ATOM    161  CG1 VAL A  23      19.866   6.713   4.304  1.00 27.07           C
ATOM    162  CG2 VAL A  23      19.469   6.764   6.774  1.00 26.77           C
ATOM    163  N   LEU A  24      18.401   3.732   7.304  1.00 27.04           N
ATOM    164  CA  LEU A  24      17.104   3.474   7.924  1.00 27.04           C
ATOM    165  C   LEU A  24      16.553   4.752   8.548  1.00 27.12           C
ATOM    166  O   LEU A  24      15.349   5.011   8.506  1.00 27.14           O
ATOM    167  CB  LEU A  24      17.244   2.415   9.020  1.00 27.15           C
ATOM    168  CG  LEU A  24      16.966   0.944   8.719  1.00 27.16           C
ATOM    169  CD1 LEU A  24      17.690   0.080   9.737  1.00 27.29           C
ATOM    170  CD2 LEU A  24      15.474   0.649   8.743  1.00 27.56           C
ATOM    171  N   GLY A  25      17.449   5.539   9.139  1.00 27.10           N
ATOM    172  CA  GLY A  25      17.078   6.762   9.821  1.00 27.12           C
ATOM    173  C   GLY A  25      18.140   7.230  10.799  1.00 27.13           C
ATOM    174  O   GLY A  25      19.211   6.632  10.911  1.00 27.18           O
ATOM    175  N   SER A  26      17.831   8.309  11.508  1.00 27.13           N
```

FIG. 4C

```
ATOM    176  CA  SER A  26      18.771   8.926  12.432  1.00 27.27           C
ATOM    177  C   SER A  26      18.074   9.331  13.726  1.00 27.18           C
ATOM    178  O   SER A  26      16.884   9.660  13.726  1.00 27.29           O
ATOM    179  CB  SER A  26      19.442  10.139  11.778  1.00 27.33           C
ATOM    180  OG  SER A  26      18.724  11.335  12.040  1.00 27.76           O
ATOM    181  N   GLY A  27      18.825   9.303  14.823  1.00 26.97           N
ATOM    182  CA  GLY A  27      18.303   9.683  16.123  1.00 26.91           C
ATOM    183  C   GLY A  27      19.148  10.749  16.785  1.00 26.84           C
ATOM    184  O   GLY A  27      19.693  11.626  16.112  1.00 26.96           O
ATOM    185  N   ALA A  28      19.260  10.663  18.108  1.00 26.71           N
ATOM    186  CA  ALA A  28      19.994  11.652  18.895  1.00 26.48           C
ATOM    187  C   ALA A  28      21.434  11.224  19.191  1.00 26.40           C
ATOM    188  O   ALA A  28      22.094  11.805  20.054  1.00 26.77           O
ATOM    189  CB  ALA A  28      19.247  11.952  20.186  1.00 26.32           C
ATOM    190  N   PHE A  29      21.917  10.205  18.484  1.00 25.95           N
ATOM    191  CA  PHE A  29      23.289   9.735  18.664  1.00 25.62           C
ATOM    192  C   PHE A  29      24.001   9.495  17.334  1.00 25.26           C
ATOM    193  O   PHE A  29      25.229   9.555  17.266  1.00 25.24           O
ATOM    194  CB  PHE A  29      23.329   8.472  19.531  1.00 25.74           C
ATOM    195  CG  PHE A  29      22.739   8.656  20.907  1.00 26.20           C
ATOM    196  CD1 PHE A  29      21.499   8.106  21.225  1.00 26.43           C
ATOM    197  CE1 PHE A  29      20.947   8.275  22.499  1.00 26.45           C
ATOM    198  CZ  PHE A  29      21.638   8.999  23.466  1.00 26.14           C
ATOM    199  CE2 PHE A  29      22.875   9.553  23.159  1.00 26.30           C
ATOM    200  CD2 PHE A  29      23.421   9.378  21.885  1.00 26.38           C
ATOM    201  N   GLY A  30      23.231   9.231  16.281  1.00 24.84           N
ATOM    202  CA  GLY A  30      23.798   8.993  14.967  1.00 24.15           C
ATOM    203  C   GLY A  30      22.830   8.427  13.948  1.00 23.71           C
ATOM    204  O   GLY A  30      21.634   8.305  14.209  1.00 23.87           O
ATOM    205  N   THR A  31      23.364   8.086  12.778  1.00 23.20           N
ATOM    206  CA  THR A  31      22.581   7.536  11.679  1.00 22.50           C
ATOM    207  C   THR A  31      22.704   6.013  11.640  1.00 22.16           C
ATOM    208  O   THR A  31      23.792   5.463  11.821  1.00 21.56           O
ATOM    209  CB  THR A  31      23.042   8.159  10.339  1.00 22.68           C
ATOM    210  OG1 THR A  31      22.930   9.587  10.412  1.00 22.50           O
ATOM    211  CG2 THR A  31      22.096   7.792   9.200  1.00 22.19           C
ATOM    212  N   VAL A  32      21.573   5.346  11.414  1.00 21.96           N
ATOM    213  CA  VAL A  32      21.526   3.890  11.300  1.00 21.83           C
ATOM    214  C   VAL A  32      21.336   3.490   9.840  1.00 21.81           C
ATOM    215  O   VAL A  32      20.497   4.054   9.133  1.00 21.57           O
ATOM    216  CB  VAL A  32      20.397   3.264  12.168  1.00 21.85           C
ATOM    217  CG1 VAL A  32      20.461   1.737  12.134  1.00 21.60           C
ATOM    218  CG2 VAL A  32      20.472   3.763  13.603  1.00 21.69           C
ATOM    219  N   TYR A  33      22.127   2.512   9.409  1.00 21.94           N
ATOM    220  CA  TYR A  33      22.095   2.002   8.043  1.00 22.18           C
ATOM    221  C   TYR A  33      21.762   0.511   8.013  1.00 22.46           C
ATOM    222  O   TYR A  33      22.098  -0.234   8.941  1.00 22.12           O
ATOM    223  CB  TYR A  33      23.451   2.223   7.366  1.00 22.08           C
ATOM    224  CG  TYR A  33      23.885   3.670   7.262  1.00 22.16           C
ATOM    225  CD1 TYR A  33      24.529   4.308   8.327  1.00 21.73           C
ATOM    226  CE1 TYR A  33      24.936   5.634   8.230  1.00 22.02           C
ATOM    227  CZ  TYR A  33      24.703   6.336   7.054  1.00 22.45           C
ATOM    228  OH  TYR A  33      25.102   7.650   6.948  1.00 22.61           O
ATOM    229  CE2 TYR A  33      24.071   5.722   5.983  1.00 22.07           C
ATOM    230  CD2 TYR A  33      23.669   4.397   6.091  1.00 21.88           C
ATOM    231  N   LYS A  34      21.091   0.091   6.943  1.00 22.96           N
ATOM    232  CA  LYS A  34      20.920  -1.324   6.630  1.00 23.53           C
ATOM    233  C   LYS A  34      22.116  -1.756   5.801  1.00 23.91           C
ATOM    234  O   LYS A  34      22.378  -1.186   4.740  1.00 24.04           O
ATOM    235  CB  LYS A  34      19.634  -1.552   5.840  1.00 23.47           C
```

FIG. 4D

```
ATOM    236  CG  LYS A  34      18.408  -1.735   6.698  1.00 23.52           C
ATOM    237  CD  LYS A  34      17.241  -2.250   5.885  1.00 24.01           C
ATOM    238  CE  LYS A  34      16.228  -1.155   5.595  1.00 24.30           C
ATOM    239  NZ  LYS A  34      14.931  -1.719   5.123  1.00 24.31           N
ATOM    240  N   GLY A  35      22.849  -2.752   6.284  1.00 24.57           N
ATOM    241  CA  GLY A  35      24.090  -3.141   5.639  1.00 25.53           C
ATOM    242  C   GLY A  35      24.414  -4.618   5.655  1.00 26.05           C
ATOM    243  O   GLY A  35      23.731  -5.412   6.299  1.00 25.91           O
ATOM    244  N   LEU A  36      25.468  -4.979   4.926  1.00 26.86           N
ATOM    245  CA  LEU A  36      25.939  -6.357   4.866  1.00 27.53           C
ATOM    246  C   LEU A  36      27.246  -6.519   5.623  1.00 27.91           C
ATOM    247  O   LEU A  36      28.161  -5.706   5.488  1.00 27.81           O
ATOM    248  CB  LEU A  36      26.125  -6.815   3.417  1.00 27.59           C
ATOM    249  CG  LEU A  36      24.887  -7.235   2.617  1.00 27.75           C
ATOM    250  CD1 LEU A  36      25.220  -7.268   1.139  1.00 27.96           C
ATOM    251  CD2 LEU A  36      24.327  -8.578   3.070  1.00 27.64           C
ATOM    252  N   TRP A  37      27.316  -7.573   6.426  1.00 28.55           N
ATOM    253  CA  TRP A  37      28.537  -7.946   7.120  1.00 29.32           C
ATOM    254  C   TRP A  37      29.161  -9.136   6.393  1.00 29.56           C
ATOM    255  O   TRP A  37      28.544 -10.198   6.271  1.00 29.63           O
ATOM    256  CB  TRP A  37      28.235  -8.282   8.588  1.00 29.55           C
ATOM    257  CG  TRP A  37      29.439  -8.624   9.439  1.00 30.21           C
ATOM    258  CD1 TRP A  37      30.760  -8.455   9.117  1.00 30.54           C
ATOM    259  NE1 TRP A  37      31.560  -8.884  10.150  1.00 30.79           N
ATOM    260  CE2 TRP A  37      30.767  -9.337  11.171  1.00 30.90           C
ATOM    261  CD2 TRP A  37      29.423  -9.187  10.758  1.00 30.80           C
ATOM    262  CE3 TRP A  37      28.404  -9.586  11.639  1.00 30.90           C
ATOM    263  CZ3 TRP A  37      28.755 -10.112  12.880  1.00 30.91           C
ATOM    264  CH2 TRP A  37      30.101 -10.247  13.256  1.00 31.12           C
ATOM    265  CZ2 TRP A  37      31.119  -9.867  12.418  1.00 31.16           C
ATOM    266  N   ILE A  38      30.377  -8.937   5.894  1.00 29.84           N
ATOM    267  CA  ILE A  38      31.122  -9.989   5.213  1.00 30.12           C
ATOM    268  C   ILE A  38      32.495 -10.182   5.866  1.00 30.29           C
ATOM    269  O   ILE A  38      33.462  -9.502   5.505  1.00 30.21           O
ATOM    270  CB  ILE A  38      31.262  -9.667   3.708  1.00 30.15           C
ATOM    271  N   PRO A  39      32.572 -11.092   6.840  1.00 30.44           N
ATOM    272  CA  PRO A  39      33.837 -11.396   7.520  1.00 30.58           C
ATOM    273  C   PRO A  39      34.744 -12.276   6.662  1.00 30.72           C
ATOM    274  O   PRO A  39      35.314 -11.787   5.684  1.00 30.85           O
ATOM    275  CB  PRO A  39      33.391 -12.163   8.774  1.00 30.57           C
ATOM    276  CG  PRO A  39      31.891 -12.069   8.798  1.00 30.59           C
ATOM    277  CD  PRO A  39      31.459 -11.893   7.379  1.00 30.54           C
ATOM    278  N   LYS A  43      33.389 -16.832   3.414  1.00 34.01           N
ATOM    279  CA  LYS A  43      32.664 -16.229   2.301  1.00 33.97           C
ATOM    280  C   LYS A  43      31.153 -16.250   2.550  1.00 33.90           C
ATOM    281  O   LYS A  43      30.432 -17.097   2.012  1.00 34.06           O
ATOM    282  CB  LYS A  43      33.011 -16.939   0.988  1.00 33.94           C
ATOM    283  N   VAL A  44      30.688 -15.314   3.376  1.00 33.72           N
ATOM    284  CA  VAL A  44      29.269 -15.191   3.715  1.00 33.43           C
ATOM    285  C   VAL A  44      28.879 -13.723   3.941  1.00 33.19           C
ATOM    286  O   VAL A  44      29.570 -12.988   4.653  1.00 33.45           O
ATOM    287  CB  VAL A  44      28.886 -16.089   4.938  1.00 33.47           C
ATOM    288  CG1 VAL A  44      29.561 -15.613   6.227  1.00 33.41           C
ATOM    289  CG2 VAL A  44      27.373 -16.183   5.108  1.00 33.62           C
ATOM    290  N   LYS A  45      27.781 -13.304   3.315  1.00 32.62           N
ATOM    291  CA  LYS A  45      27.285 -11.935   3.448  1.00 31.95           C
ATOM    292  C   LYS A  45      25.982 -11.900   4.248  1.00 31.55           C
ATOM    293  O   LYS A  45      24.954 -12.413   3.800  1.00 31.42           O
ATOM    294  CB  LYS A  45      27.093 -11.299   2.069  1.00 32.12           C
ATOM    295  CG  LYS A  45      28.393 -10.981   1.338  1.00 31.98           C
```

FIG. 4E

```
ATOM    296  N   ILE A  46      26.038 -11.295   5.433  1.00 31.01           N
ATOM    297  CA  ILE A  46      24.899 -11.261   6.353  1.00 30.53           C
ATOM    298  C   ILE A  46      24.293  -9.856   6.462  1.00 30.18           C
ATOM    299  O   ILE A  46      25.002  -8.899   6.787  1.00 30.09           O
ATOM    300  CB  ILE A  46      25.307 -11.778   7.765  1.00 30.44           C
ATOM    301  CG1 ILE A  46      25.978 -13.152   7.679  1.00 30.56           C
ATOM    302  CD1 ILE A  46      27.075 -13.372   8.709  1.00 30.37           C
ATOM    303  CG2 ILE A  46      24.097 -11.845   8.693  1.00 30.32           C
ATOM    304  N   PRO A  47      22.988  -9.734   6.194  1.00 29.71           N
ATOM    305  CA  PRO A  47      22.262  -8.483   6.448  1.00 29.17           C
ATOM    306  C   PRO A  47      22.389  -8.085   7.915  1.00 28.54           C
ATOM    307  O   PRO A  47      22.234  -8.925   8.808  1.00 28.40           O
ATOM    308  CB  PRO A  47      20.812  -8.840   6.108  1.00 29.22           C
ATOM    309  CG  PRO A  47      20.923  -9.976   5.157  1.00 29.60           C
ATOM    310  CD  PRO A  47      22.110 -10.771   5.620  1.00 29.70           C
ATOM    311  N   VAL A  48      22.685  -6.812   8.150  1.00 27.79           N
ATOM    312  CA  VAL A  48      23.035  -6.334   9.481  1.00 26.99           C
ATOM    313  C   VAL A  48      22.648  -4.863   9.666  1.00 26.58           C
ATOM    314  O   VAL A  48      22.428  -4.143   8.688  1.00 26.41           O
ATOM    315  CB  VAL A  48      24.551  -6.597   9.769  1.00 26.88           C
ATOM    316  CG1 VAL A  48      25.412  -5.349   9.556  1.00 26.52           C
ATOM    317  CG2 VAL A  48      24.746  -7.193  11.149  1.00 26.78           C
ATOM    318  N   ALA A  49      22.538  -4.436  10.921  1.00 26.08           N
ATOM    319  CA  ALA A  49      22.311  -3.031  11.243  1.00 25.76           C
ATOM    320  C   ALA A  49      23.628  -2.351  11.620  1.00 25.45           C
ATOM    321  O   ALA A  49      24.440  -2.917  12.352  1.00 25.30           O
ATOM    322  CB  ALA A  49      21.289  -2.896  12.365  1.00 25.64           C
ATOM    323  N   ILE A  50      23.839  -1.145  11.100  1.00 25.22           N
ATOM    324  CA  ILE A  50      25.047  -0.375  11.388  1.00 24.92           C
ATOM    325  C   ILE A  50      24.669   1.022  11.858  1.00 24.98           C
ATOM    326  O   ILE A  50      23.987   1.754  11.142  1.00 24.99           O
ATOM    327  CB  ILE A  50      25.969  -0.292  10.143  1.00 24.84           C
ATOM    328  CG1 ILE A  50      26.370  -1.690   9.663  1.00 24.62           C
ATOM    329  CD1 ILE A  50      26.345  -1.847   8.169  1.00 24.45           C
ATOM    330  CG2 ILE A  50      27.212   0.548  10.440  1.00 24.57           C
ATOM    331  N   LYS A  51      25.104   1.384  13.064  1.00 24.96           N
ATOM    332  CA  LYS A  51      24.872   2.727  13.585  1.00 24.88           C
ATOM    333  C   LYS A  51      26.168   3.527  13.667  1.00 25.02           C
ATOM    334  O   LYS A  51      27.059   3.209  14.459  1.00 24.91           O
ATOM    335  CB  LYS A  51      24.177   2.683  14.948  1.00 24.81           C
ATOM    336  CG  LYS A  51      23.684   4.048  15.428  1.00 24.46           C
ATOM    337  CD  LYS A  51      23.423   4.058  16.918  1.00 23.98           C
ATOM    338  CE  LYS A  51      22.136   4.793  17.240  1.00 24.44           C
ATOM    339  NZ  LYS A  51      20.944   3.912  17.088  1.00 24.60           N
ATOM    340  N   GLU A  52      26.265   4.563  12.840  1.00 25.22           N
ATOM    341  CA  GLU A  52      27.416   5.457  12.870  1.00 25.49           C
ATOM    342  C   GLU A  52      27.112   6.680  13.720  1.00 25.56           C
ATOM    343  O   GLU A  52      26.217   7.459  13.397  1.00 25.56           O
ATOM    344  CB  GLU A  52      27.836   5.869  11.458  1.00 25.46           C
ATOM    345  CG  GLU A  52      29.131   6.665  11.419  1.00 25.64           C
ATOM    346  CD  GLU A  52      29.686   6.820  10.021  1.00 26.06           C
ATOM    347  OE1 GLU A  52      28.934   7.251   9.119  1.00 26.33           O
ATOM    348  OE2 GLU A  52      30.881   6.514   9.826  1.00 26.57           O
ATOM    349  N   LEU A  53      27.865   6.835  14.806  1.00 25.93           N
ATOM    350  CA  LEU A  53      27.695   7.960  15.722  1.00 26.28           C
ATOM    351  C   LEU A  53      28.093   9.273  15.054  1.00 26.67           C
ATOM    352  O   LEU A  53      28.993   9.298  14.207  1.00 26.73           O
ATOM    353  CB  LEU A  53      28.493   7.739  17.013  1.00 26.26           C
ATOM    354  CG  LEU A  53      28.203   6.499  17.874  1.00 25.99           C
ATOM    355  CD1 LEU A  53      29.026   6.547  19.152  1.00 25.76           C
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FIG. 4F

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ATOM    356  CD2 LEU A  53      26.717   6.334  18.201  1.00 25.22           C
ATOM    357  N   ARG A  54      27.416  10.354  15.440  1.00 26.99           N
ATOM    358  CA  ARG A  54      27.547  11.648  14.762  1.00 27.40           C
ATOM    359  C   ARG A  54      28.922  12.298  14.910  1.00 27.37           C
ATOM    360  O   ARG A  54      29.485  12.793  13.933  1.00 27.33           O
ATOM    361  CB  ARG A  54      26.439  12.619  15.195  1.00 27.61           C
ATOM    362  CG  ARG A  54      26.112  12.602  16.682  1.00 28.23           C
ATOM    363  CD  ARG A  54      25.970  13.980  17.297  1.00 29.16           C
ATOM    364  NE  ARG A  54      24.622  14.221  17.806  1.00 29.84           N
ATOM    365  CZ  ARG A  54      24.212  13.915  19.034  1.00 30.13           C
ATOM    366  NH1 ARG A  54      25.040  13.343  19.902  1.00 29.81           N
ATOM    367  NH2 ARG A  54      22.965  14.183  19.398  1.00 30.10           N
ATOM    368  N   GLU A  55      29.458  12.293  16.126  1.00 27.50           N
ATOM    369  CA  GLU A  55      30.733  12.949  16.401  1.00 27.75           C
ATOM    370  C   GLU A  55      31.941  12.082  16.047  1.00 27.52           C
ATOM    371  O   GLU A  55      31.885  10.855  16.133  1.00 27.53           O
ATOM    372  CB  GLU A  55      30.804  13.391  17.864  1.00 27.86           C
ATOM    373  CG  GLU A  55      31.440  14.758  18.062  1.00 28.71           C
ATOM    374  CD  GLU A  55      30.638  15.876  17.423  1.00 29.44           C
ATOM    375  OE1 GLU A  55      31.133  16.472  16.444  1.00 29.52           O
ATOM    376  OE2 GLU A  55      29.511  16.153  17.894  1.00 29.93           O
ATOM    377  N   ALA A  56      33.025  12.736  15.639  1.00 27.39           N
ATOM    378  CA  ALA A  56      34.281  12.056  15.341  1.00 27.18           C
ATOM    379  C   ALA A  56      35.075  11.871  16.625  1.00 27.07           C
ATOM    380  O   ALA A  56      35.031  12.723  17.516  1.00 27.11           O
ATOM    381  CB  ALA A  56      35.083  12.844  14.327  1.00 27.15           C
ATOM    382  N   THR A  57      35.801  10.760  16.714  1.00 26.90           N
ATOM    383  CA  THR A  57      36.483  10.379  17.953  1.00 26.74           C
ATOM    384  C   THR A  57      37.999  10.255  17.799  1.00 26.58           C
ATOM    385  O   THR A  57      38.504   9.988  16.708  1.00 26.61           O
ATOM    386  CB  THR A  57      35.915   9.050  18.487  1.00 26.65           C
ATOM    387  OG1 THR A  57      35.978   8.058  17.455  1.00 26.93           O
ATOM    388  CG2 THR A  57      34.423   9.166  18.783  1.00 26.44           C
ATOM    389  N   SER A  58      38.710  10.449  18.908  1.00 26.43           N
ATOM    390  CA  SER A  58      40.156  10.253  18.965  1.00 26.28           C
ATOM    391  C   SER A  58      40.470   8.818  19.403  1.00 26.29           C
ATOM    392  O   SER A  58      39.589   8.133  19.925  1.00 26.21           O
ATOM    393  CB  SER A  58      40.794  11.269  19.923  1.00 26.26           C
ATOM    394  OG  SER A  58      40.450  11.006  21.273  1.00 25.83           O
ATOM    395  N   PRO A  59      41.702   8.353  19.175  1.00 26.34           N
ATOM    396  CA  PRO A  59      42.135   7.035  19.660  1.00 26.51           C
ATOM    397  C   PRO A  59      42.071   6.890  21.184  1.00 26.85           C
ATOM    398  O   PRO A  59      41.934   5.768  21.667  1.00 26.99           O
ATOM    399  CB  PRO A  59      43.585   6.949  19.184  1.00 26.33           C
ATOM    400  CG  PRO A  59      43.639   7.861  18.024  1.00 26.20           C
ATOM    401  CD  PRO A  59      42.770   9.019  18.405  1.00 26.26           C
ATOM    402  N   LYS A  60      42.170   7.998  21.916  1.00 27.14           N
ATOM    403  CA  LYS A  60      42.016   7.986  23.369  1.00 27.39           C
ATOM    404  C   LYS A  60      40.575   7.673  23.763  1.00 27.44           C
ATOM    405  O   LYS A  60      40.331   6.898  24.692  1.00 27.55           O
ATOM    406  CB  LYS A  60      42.447   9.325  23.972  1.00 27.46           C
ATOM    407  CG  LYS A  60      42.583   9.306  25.488  1.00 28.00           C
ATOM    408  CD  LYS A  60      42.869  10.693  26.034  1.00 28.93           C
ATOM    409  CE  LYS A  60      43.871  10.640  27.177  1.00 29.23           C
ATOM    410  NZ  LYS A  60      44.059  11.981  27.803  1.00 29.95           N
ATOM    411  N   ALA A  61      39.630   8.284  23.052  1.00 27.44           N
ATOM    412  CA  ALA A  61      38.206   8.077  23.298  1.00 27.57           C
ATOM    413  C   ALA A  61      37.722   6.740  22.734  1.00 27.64           C
ATOM    414  O   ALA A  61      36.712   6.202  23.186  1.00 27.63           O
ATOM    415  CB  ALA A  61      37.398   9.227  22.722  1.00 27.47           C
```

FIG. 4G

```
ATOM    416  N   ASN A  62      38.451   6.215  21.750  1.00 27.74           N
ATOM    417  CA  ASN A  62      38.147   4.919  21.146  1.00 27.81           C
ATOM    418  C   ASN A  62      38.422   3.737  22.079  1.00 28.04           C
ATOM    419  O   ASN A  62      37.747   2.708  21.995  1.00 28.04           O
ATOM    420  CB  ASN A  62      38.904   4.750  19.825  1.00 27.69           C
ATOM    421  CG  ASN A  62      38.184   5.397  18.641  1.00 27.43           C
ATOM    422  OD1 ASN A  62      38.733   5.486  17.546  1.00 27.39           O
ATOM    423  ND2 ASN A  62      36.953   5.844  18.858  1.00 27.18           N
ATOM    424  N   LYS A  63      39.409   3.891  22.962  1.00 28.17           N
ATOM    425  CA  LYS A  63      39.689   2.900  24.003  1.00 28.31           C
ATOM    426  C   LYS A  63      38.604   2.948  25.069  1.00 28.13           C
ATOM    427  O   LYS A  63      38.251   1.921  25.652  1.00 28.20           O
ATOM    428  CB  LYS A  63      41.059   3.133  24.657  1.00 28.53           C
ATOM    429  CG  LYS A  63      42.145   3.632  23.720  1.00 29.21           C
ATOM    430  CD  LYS A  63      43.536   3.291  24.232  1.00 30.19           C
ATOM    431  CE  LYS A  63      44.615   3.990  23.415  1.00 30.62           C
ATOM    432  NZ  LYS A  63      44.634   3.538  21.990  1.00 31.28           N
ATOM    433  N   GLU A  64      38.094   4.153  25.319  1.00 27.93           N
ATOM    434  CA  GLU A  64      37.020   4.381  26.280  1.00 27.83           C
ATOM    435  C   GLU A  64      35.699   3.799  25.775  1.00 27.57           C
ATOM    436  O   GLU A  64      34.914   3.256  26.555  1.00 27.65           O
ATOM    437  CB  GLU A  64      36.866   5.880  26.555  1.00 28.05           C
ATOM    438  CG  GLU A  64      37.613   6.378  27.784  1.00 28.76           C
ATOM    439  CD  GLU A  64      38.500   7.575  27.489  1.00 29.57           C
ATOM    440  OE1 GLU A  64      37.961   8.662  27.184  1.00 29.83           O
ATOM    441  OE2 GLU A  64      39.740   7.429  27.563  1.00 30.06           O
ATOM    442  N   ILE A  65      35.468   3.915  24.469  1.00 27.10           N
ATOM    443  CA  ILE A  65      34.265   3.382  23.833  1.00 26.79           C
ATOM    444  C   ILE A  65      34.319   1.850  23.722  1.00 26.71           C
ATOM    445  O   ILE A  65      33.310   1.174  23.944  1.00 26.61           O
ATOM    446  CB  ILE A  65      34.032   4.066  22.452  1.00 26.69           C
ATOM    447  CG1 ILE A  65      33.404   5.452  22.646  1.00 26.51           C
ATOM    448  CD1 ILE A  65      33.810   6.480  21.600  1.00 26.15           C
ATOM    449  CG2 ILE A  65      33.156   3.208  21.538  1.00 26.44           C
ATOM    450  N   LEU A  66      35.498   1.316  23.398  1.00 26.55           N
ATOM    451  CA  LEU A  66      35.705  -0.130  23.275  1.00 26.54           C
ATOM    452  C   LEU A  66      35.515  -0.865  24.605  1.00 26.56           C
ATOM    453  O   LEU A  66      34.974  -1.971  24.630  1.00 26.50           O
ATOM    454  CB  LEU A  66      37.088  -0.437  22.684  1.00 26.51           C
ATOM    455  CG  LEU A  66      37.414  -1.887  22.299  1.00 26.33           C
ATOM    456  CD1 LEU A  66      36.859  -2.252  20.931  1.00 26.29           C
ATOM    457  CD2 LEU A  66      38.914  -2.117  22.338  1.00 26.51           C
ATOM    458  N   ASP A  67      35.957  -0.241  25.698  1.00 26.48           N
ATOM    459  CA  ASP A  67      35.749  -0.774  27.044  1.00 26.50           C
ATOM    460  C   ASP A  67      34.261  -0.928  27.351  1.00 26.28           C
ATOM    461  O   ASP A  67      33.853  -1.899  27.990  1.00 26.56           O
ATOM    462  CB  ASP A  67      36.401   0.133  28.093  1.00 26.74           C
ATOM    463  CG  ASP A  67      37.902  -0.083  28.211  1.00 27.46           C
ATOM    464  OD1 ASP A  67      38.393  -1.177  27.841  1.00 27.71           O
ATOM    465  OD2 ASP A  67      38.670   0.793  28.671  1.00 27.91           O
ATOM    466  N   GLU A  68      33.464   0.034  26.891  1.00 25.78           N
ATOM    467  CA  GLU A  68      32.012  -0.014  27.029  1.00 25.30           C
ATOM    468  C   GLU A  68      31.381  -0.976  26.025  1.00 24.91           C
ATOM    469  O   GLU A  68      30.321  -1.545  26.290  1.00 25.04           O
ATOM    470  CB  GLU A  68      31.412   1.385  26.860  1.00 25.52           C
ATOM    471  N   ALA A  69      32.035  -1.151  24.879  1.00 24.34           N
ATOM    472  CA  ALA A  69      31.558  -2.056  23.835  1.00 23.87           C
ATOM    473  C   ALA A  69      31.687  -3.522  24.243  1.00 23.69           C
ATOM    474  O   ALA A  69      30.874  -4.360  23.843  1.00 23.53           O
ATOM    475  CB  ALA A  69      32.297  -1.801  22.529  1.00 23.87           C
```

FIG. 4H

```
ATOM    476  N   TYR A  70      32.711  -3.825  25.039  1.00 23.46           N
ATOM    477  CA  TYR A  70      32.927  -5.184  25.529  1.00 23.29           C
ATOM    478  C   TYR A  70      31.781  -5.661  26.422  1.00 22.94           C
ATOM    479  O   TYR A  70      31.283  -6.771  26.243  1.00 22.72           O
ATOM    480  CB  TYR A  70      34.274  -5.303  26.251  1.00 23.45           C
ATOM    481  CG  TYR A  70      35.452  -5.516  25.322  1.00 23.79           C
ATOM    482  CD1 TYR A  70      36.552  -4.659  25.354  1.00 24.15           C
ATOM    483  CE1 TYR A  70      37.640  -4.848  24.505  1.00 24.42           C
ATOM    484  CZ  TYR A  70      37.633  -5.904  23.609  1.00 24.64           C
ATOM    485  OH  TYR A  70      38.705  -6.089  22.768  1.00 25.17           O
ATOM    486  CE2 TYR A  70      36.554  -6.774  23.556  1.00 24.46           C
ATOM    487  CD2 TYR A  70      35.471  -6.577  24.413  1.00 24.17           C
ATOM    488  N   VAL A  71      31.361  -4.812  27.361  1.00 22.73           N
ATOM    489  CA  VAL A  71      30.232  -5.123  28.245  1.00 22.60           C
ATOM    490  C   VAL A  71      28.891  -5.095  27.498  1.00 22.24           C
ATOM    491  O   VAL A  71      27.947  -5.789  27.883  1.00 22.18           O
ATOM    492  CB  VAL A  71      30.209  -4.222  29.526  1.00 22.72           C
ATOM    493  CG1 VAL A  71      29.394  -2.946  29.316  1.00 23.15           C
ATOM    494  CG2 VAL A  71      29.677  -4.998  30.720  1.00 22.88           C
ATOM    495  N   MET A  72      28.830  -4.305  26.428  1.00 21.84           N
ATOM    496  CA  MET A  72      27.656  -4.231  25.562  1.00 21.50           C
ATOM    497  C   MET A  72      27.478  -5.515  24.743  1.00 21.21           C
ATOM    498  O   MET A  72      26.351  -5.948  24.488  1.00 21.23           O
ATOM    499  CB  MET A  72      27.768  -3.025  24.624  1.00 21.61           C
ATOM    500  CG  MET A  72      26.904  -1.837  25.019  1.00 21.94           C
ATOM    501  SD  MET A  72      27.649  -0.233  24.642  1.00 22.75           S
ATOM    502  CE  MET A  72      27.395  -0.140  22.876  1.00 22.15           C
ATOM    503  N   ALA A  73      28.595  -6.114  24.337  1.00 20.68           N
ATOM    504  CA  ALA A  73      28.582  -7.336  23.533  1.00 20.30           C
ATOM    505  C   ALA A  73      28.360  -8.600  24.367  1.00 20.05           C
ATOM    506  O   ALA A  73      28.024  -9.658  23.826  1.00 19.98           O
ATOM    507  CB  ALA A  73      29.868  -7.450  22.740  1.00 20.23           C
ATOM    508  N   SER A  74      28.552  -8.487  25.678  1.00 19.70           N
ATOM    509  CA  SER A  74      28.418  -9.625  26.582  1.00 19.65           C
ATOM    510  C   SER A  74      27.036  -9.683  27.227  1.00 19.63           C
ATOM    511  O   SER A  74      26.816 -10.444  28.171  1.00 19.59           O
ATOM    512  CB  SER A  74      29.497  -9.568  27.663  1.00 19.64           C
ATOM    513  OG  SER A  74      29.360  -8.394  28.444  1.00 19.34           O
ATOM    514  N   VAL A  75      26.110  -8.875  26.714  1.00 19.56           N
ATOM    515  CA  VAL A  75      24.753  -8.820  27.247  1.00 19.62           C
ATOM    516  C   VAL A  75      23.961 -10.040  26.785  1.00 19.63           C
ATOM    517  O   VAL A  75      23.721 -10.234  25.592  1.00 19.87           O
ATOM    518  CB  VAL A  75      24.051  -7.484  26.892  1.00 19.56           C
ATOM    519  CG1 VAL A  75      22.548  -7.609  26.995  1.00 19.64           C
ATOM    520  CG2 VAL A  75      24.544  -6.376  27.811  1.00 19.28           C
ATOM    521  N   ASP A  76      23.574 -10.863  27.751  1.00 19.68           N
ATOM    522  CA  ASP A  76      22.984 -12.165  27.473  1.00 19.85           C
ATOM    523  C   ASP A  76      21.602 -12.285  28.106  1.00 19.56           C
ATOM    524  O   ASP A  76      21.469 -12.729  29.249  1.00 19.88           O
ATOM    525  CB  ASP A  76      23.915 -13.272  27.976  1.00 20.10           C
ATOM    526  CG  ASP A  76      23.440 -14.658  27.594  1.00 21.13           C
ATOM    527  OD1 ASP A  76      23.099 -14.875  26.409  1.00 22.00           O
ATOM    528  OD2 ASP A  76      23.381 -15.597  28.417  1.00 22.09           O
ATOM    529  N   ASN A  77      20.586 -11.869  27.351  1.00 18.92           N
ATOM    530  CA  ASN A  77      19.190 -11.898  27.786  1.00 18.24           C
ATOM    531  C   ASN A  77      18.263 -11.902  26.568  1.00 17.79           C
ATOM    532  O   ASN A  77      18.519 -11.184  25.602  1.00 17.62           O
ATOM    533  CB  ASN A  77      18.879 -10.694  28.684  1.00 18.12           C
ATOM    534  CG  ASN A  77      17.521 -10.798  29.357  1.00 17.98           C
ATOM    535  OD1 ASN A  77      16.498 -10.402  28.792  1.00 17.52           O
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FIG. 4I

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ATOM    536  ND2 ASN A  77      17.504 -11.336  30.570  1.00 17.96           N
ATOM    537  N   PRO A  78      17.196 -12.701  26.608  1.00 17.55           N
ATOM    538  CA  PRO A  78      16.241 -12.777  25.490  1.00 17.35           C
ATOM    539  C   PRO A  78      15.580 -11.444  25.115  1.00 17.03           C
ATOM    540  O   PRO A  78      15.050 -11.334  24.011  1.00 17.06           O
ATOM    541  CB  PRO A  78      15.178 -13.759  26.002  1.00 17.38           C
ATOM    542  CG  PRO A  78      15.868 -14.558  27.055  1.00 17.33           C
ATOM    543  CD  PRO A  78      16.821 -13.609  27.709  1.00 17.45           C
ATOM    544  N   HIS A  79      15.615 -10.456  26.007  1.00 16.78           N
ATOM    545  CA  HIS A  79      14.908  -9.193  25.781  1.00 16.48           C
ATOM    546  C   HIS A  79      15.818  -7.961  25.750  1.00 16.20           C
ATOM    547  O   HIS A  79      15.361  -6.833  25.926  1.00 16.03           O
ATOM    548  CB  HIS A  79      13.769  -9.036  26.794  1.00 16.50           C
ATOM    549  CG  HIS A  79      12.910 -10.256  26.913  1.00 16.54           C
ATOM    550  ND1 HIS A  79      12.004 -10.625  25.941  1.00 16.70           N
ATOM    551  CE1 HIS A  79      11.411 -11.749  26.301  1.00 17.03           C
ATOM    552  NE2 HIS A  79      11.902 -12.125  27.468  1.00 16.85           N
ATOM    553  CD2 HIS A  79      12.845 -11.211  27.869  1.00 16.65           C
ATOM    554  N   VAL A  80      17.108  -8.190  25.522  1.00 16.05           N
ATOM    555  CA  VAL A  80      18.059  -7.110  25.267  1.00 16.06           C
ATOM    556  C   VAL A  80      18.901  -7.460  24.038  1.00 16.03           C
ATOM    557  O   VAL A  80      19.465  -8.554  23.951  1.00 15.94           O
ATOM    558  CB  VAL A  80      18.991  -6.827  26.480  1.00 15.93           C
ATOM    559  CG1 VAL A  80      19.733  -5.514  26.289  1.00 16.08           C
ATOM    560  CG2 VAL A  80      18.213  -6.794  27.793  1.00 16.22           C
ATOM    561  N   CYS A  81      18.966  -6.537  23.084  1.00 16.00           N
ATOM    562  CA  CYS A  81      19.822  -6.701  21.915  1.00 15.98           C
ATOM    563  C   CYS A  81      21.281  -6.567  22.320  1.00 16.16           C
ATOM    564  O   CYS A  81      21.651  -5.645  23.056  1.00 16.19           O
ATOM    565  CB  CYS A  81      19.493  -5.657  20.852  1.00 15.86           C
ATOM    566  SG  CYS A  81      17.783  -5.682  20.280  1.00 16.45           S
ATOM    567  N   ARG A  82      22.107  -7.496  21.849  1.00 16.32           N
ATOM    568  CA  ARG A  82      23.538  -7.431  22.103  1.00 16.37           C
ATOM    569  C   ARG A  82      24.271  -6.785  20.930  1.00 16.42           C
ATOM    570  O   ARG A  82      23.775  -6.783  19.798  1.00 16.36           O
ATOM    571  CB  ARG A  82      24.104  -8.819  22.435  1.00 16.43           C
ATOM    572  CG  ARG A  82      24.212  -9.779  21.262  1.00 17.04           C
ATOM    573  CD  ARG A  82      24.861 -11.117  21.606  1.00 17.08           C
ATOM    574  NE  ARG A  82      26.310 -10.999  21.752  1.00 16.95           N
ATOM    575  CZ  ARG A  82      27.195 -11.441  20.867  1.00 16.88           C
ATOM    576  NH1 ARG A  82      28.490 -11.283  21.096  1.00 16.92           N
ATOM    577  NH2 ARG A  82      26.797 -12.040  19.752  1.00 16.92           N
ATOM    578  N   LEU A  83      25.440  -6.218  21.217  1.00 16.39           N
ATOM    579  CA  LEU A  83      26.304  -5.659  20.189  1.00 16.29           C
ATOM    580  C   LEU A  83      27.126  -6.778  19.559  1.00 16.57           C
ATOM    581  O   LEU A  83      27.807  -7.528  20.262  1.00 16.60           O
ATOM    582  CB  LEU A  83      27.215  -4.579  20.785  1.00 16.22           C
ATOM    583  CG  LEU A  83      28.004  -3.684  19.823  1.00 15.85           C
ATOM    584  CD1 LEU A  83      27.071  -2.807  18.993  1.00 15.73           C
ATOM    585  CD2 LEU A  83      29.006  -2.838  20.584  1.00 15.19           C
ATOM    586  N   LEU A  84      27.047  -6.896  18.236  1.00 16.76           N
ATOM    587  CA  LEU A  84      27.745  -7.958  17.517  1.00 17.01           C
ATOM    588  C   LEU A  84      29.176  -7.563  17.165  1.00 17.23           C
ATOM    589  O   LEU A  84      30.108  -8.351  17.349  1.00 17.18           O
ATOM    590  CB  LEU A  84      26.978  -8.370  16.252  1.00 17.03           C
ATOM    591  CG  LEU A  84      25.513  -8.812  16.363  1.00 17.02           C
ATOM    592  CD1 LEU A  84      24.934  -9.026  14.978  1.00 16.99           C
ATOM    593  CD2 LEU A  84      25.355 -10.076  17.200  1.00 17.18           C
ATOM    594  N   GLY A  85      29.343  -6.342  16.664  1.00 17.48           N
ATOM    595  CA  GLY A  85      30.644  -5.859  16.239  1.00 17.82           C
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FIG. 4J

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ATOM    596  C   GLY A  85      30.819  -4.359  16.362  1.00 18.07           C
ATOM    597  O   GLY A  85      29.864  -3.624  16.636  1.00 18.08           O
ATOM    598  N   ILE A  86      32.054  -3.909  16.155  1.00 18.32           N
ATOM    599  CA  ILE A  86      32.396  -2.487  16.211  1.00 18.48           C
ATOM    600  C   ILE A  86      33.548  -2.160  15.257  1.00 18.45           C
ATOM    601  O   ILE A  86      34.468  -2.962  15.088  1.00 18.58           O
ATOM    602  CB  ILE A  86      32.715  -2.051  17.680  1.00 18.40           C
ATOM    603  CG1 ILE A  86      32.659  -0.527  17.827  1.00 18.47           C
ATOM    604  CD1 ILE A  86      32.054  -0.048  19.136  1.00 18.61           C
ATOM    605  CG2 ILE A  86      34.048  -2.634  18.172  1.00 18.36           C
ATOM    606  N   CYS A  87      33.474  -0.991  14.625  1.00 18.51           N
ATOM    607  CA  CYS A  87      34.562  -0.470  13.803  1.00 18.57           C
ATOM    608  C   CYS A  87      35.006   0.883  14.344  1.00 18.66           C
ATOM    609  O   CYS A  87      34.233   1.843  14.338  1.00 18.66           O
ATOM    610  CB  CYS A  87      34.120  -0.335  12.347  1.00 18.69           C
ATOM    611  SG  CYS A  87      35.452   0.059  11.185  1.00 19.10           S
ATOM    612  N   LEU A  88      36.248   0.952  14.819  1.00 18.94           N
ATOM    613  CA  LEU A  88      36.782   2.182  15.407  1.00 19.23           C
ATOM    614  C   LEU A  88      37.864   2.823  14.541  1.00 19.32           C
ATOM    615  O   LEU A  88      39.016   2.384  14.526  1.00 19.42           O
ATOM    616  CB  LEU A  88      37.297   1.942  16.833  1.00 19.16           C
ATOM    617  CG  LEU A  88      36.265   1.583  17.911  1.00 19.62           C
ATOM    618  CD1 LEU A  88      36.939   0.968  19.127  1.00 19.50           C
ATOM    619  CD2 LEU A  88      35.440   2.788  18.325  1.00 19.54           C
ATOM    620  N   THR A  89      37.464   3.858  13.811  1.00 19.57           N
ATOM    621  CA  THR A  89      38.380   4.679  13.028  1.00 19.85           C
ATOM    622  C   THR A  89      38.328   6.101  13.593  1.00 19.94           C
ATOM    623  O   THR A  89      38.535   6.296  14.793  1.00 19.99           O
ATOM    624  CB  THR A  89      38.001   4.646  11.528  1.00 19.89           C
ATOM    625  OG1 THR A  89      36.581   4.785  11.381  1.00 20.27           O
ATOM    626  CG2 THR A  89      38.284   3.278  10.929  1.00 19.88           C
ATOM    627  N   SER A  90      38.049   7.088  12.743  1.00 19.99           N
ATOM    628  CA  SER A  90      37.726   8.432  13.219  1.00 20.17           C
ATOM    629  C   SER A  90      36.265   8.464  13.666  1.00 20.14           C
ATOM    630  O   SER A  90      35.877   9.292  14.491  1.00 20.44           O
ATOM    631  CB  SER A  90      37.977   9.482  12.139  1.00 20.18           C
ATOM    632  OG  SER A  90      37.379   9.104  10.911  1.00 20.96           O
ATOM    633  N   THR A  91      35.468   7.549  13.116  1.00 19.87           N
ATOM    634  CA  THR A  91      34.072   7.382  13.510  1.00 19.58           C
ATOM    635  C   THR A  91      33.856   6.044  14.216  1.00 19.51           C
ATOM    636  O   THR A  91      34.613   5.085  14.010  1.00 19.54           O
ATOM    637  CB  THR A  91      33.130   7.486  12.288  1.00 19.65           C
ATOM    638  OG1 THR A  91      33.410   6.422  11.368  1.00 19.55           O
ATOM    639  CG2 THR A  91      33.412   8.750  11.481  1.00 19.51           C
ATOM    640  N   VAL A  92      32.821   5.999  15.051  1.00 19.08           N
ATOM    641  CA  VAL A  92      32.411   4.786  15.748  1.00 18.72           C
ATOM    642  C   VAL A  92      31.215   4.192  15.015  1.00 18.52           C
ATOM    643  O   VAL A  92      30.201   4.872  14.811  1.00 18.23           O
ATOM    644  CB  VAL A  92      32.036   5.079  17.224  1.00 18.93           C
ATOM    645  CG1 VAL A  92      31.485   3.833  17.917  1.00 18.55           C
ATOM    646  CG2 VAL A  92      33.236   5.635  17.983  1.00 19.17           C
ATOM    647  N   GLN A  93      31.340   2.929  14.612  1.00 18.15           N
ATOM    648  CA  GLN A  93      30.278   2.259  13.866  1.00 18.10           C
ATOM    649  C   GLN A  93      29.852   0.965  14.555  1.00 17.96           C
ATOM    650  O   GLN A  93      30.594  -0.019  14.575  1.00 18.09           O
ATOM    651  CB  GLN A  93      30.698   2.016  12.410  1.00 18.03           C
ATOM    652  CG  GLN A  93      30.900   3.296  11.608  1.00 17.82           C
ATOM    653  CD  GLN A  93      31.124   3.043  10.133  1.00 18.23           C
ATOM    654  OE1 GLN A  93      30.168   2.847   9.383  1.00 18.82           O
ATOM    655  NE2 GLN A  93      32.383   3.056   9.709  1.00 17.84           N
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FIG. 4K

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ATOM    656  N   LEU A  94      28.651   0.988  15.126  1.00 17.85           N
ATOM    657  CA  LEU A  94      28.125  -0.128  15.906  1.00 17.83           C
ATOM    658  C   LEU A  94      27.372  -1.111  15.017  1.00 17.85           C
ATOM    659  O   LEU A  94      26.526  -0.711  14.214  1.00 17.77           O
ATOM    660  CB  LEU A  94      27.208   0.382  17.023  1.00 17.79           C
ATOM    661  CG  LEU A  94      27.785   1.411  18.001  1.00 18.19           C
ATOM    662  CD1 LEU A  94      26.729   2.434  18.385  1.00 18.54           C
ATOM    663  CD2 LEU A  94      28.355   0.743  19.242  1.00 18.09           C
ATOM    664  N   ILE A  95      27.683  -2.396  15.167  1.00 17.79           N
ATOM    665  CA  ILE A  95      27.047  -3.438  14.364  1.00 17.61           C
ATOM    666  C   ILE A  95      26.143  -4.321  15.223  1.00 17.27           C
ATOM    667  O   ILE A  95      26.604  -4.997  16.142  1.00 17.09           O
ATOM    668  CB  ILE A  95      28.112  -4.263  13.577  1.00 17.84           C
ATOM    669  CG1 ILE A  95      28.764  -3.398  12.495  1.00 17.99           C
ATOM    670  CD1 ILE A  95      30.161  -2.931  12.843  1.00 19.08           C
ATOM    671  CG2 ILE A  95      27.493  -5.498  12.926  1.00 17.50           C
ATOM    672  N   THR A  96      24.849  -4.285  14.915  1.00 17.10           N
ATOM    673  CA  THR A  96      23.843  -5.096  15.598  1.00 17.04           C
ATOM    674  C   THR A  96      23.044  -5.906  14.588  1.00 17.16           C
ATOM    675  O   THR A  96      23.148  -5.685  13.378  1.00 17.06           O
ATOM    676  CB  THR A  96      22.871  -4.216  16.417  1.00 16.89           C
ATOM    677  OG1 THR A  96      22.467  -3.090  15.630  1.00 17.74           O
ATOM    678  CG2 THR A  96      23.563  -3.594  17.627  1.00 16.46           C
ATOM    679  N   GLN A  97      22.245  -6.841  15.098  1.00 17.15           N
ATOM    680  CA  GLN A  97      21.337  -7.632  14.282  1.00 17.15           C
ATOM    681  C   GLN A  97      20.247  -6.754  13.668  1.00 17.13           C
ATOM    682  O   GLN A  97      19.576  -5.989  14.374  1.00 16.94           O
ATOM    683  CB  GLN A  97      20.702  -8.732  15.133  1.00 17.29           C
ATOM    684  CG  GLN A  97      19.940  -9.788  14.351  1.00 18.00           C
ATOM    685  CD  GLN A  97      19.295 -10.832  15.246  1.00 19.09           C
ATOM    686  OE1 GLN A  97      19.522 -10.849  16.458  1.00 20.02           O
ATOM    687  NE2 GLN A  97      18.484 -11.703  14.653  1.00 19.24           N
ATOM    688  N   LEU A  98      20.090  -6.863  12.351  1.00 17.04           N
ATOM    689  CA  LEU A  98      19.015  -6.184  11.636  1.00 17.05           C
ATOM    690  C   LEU A  98      17.678  -6.803  12.019  1.00 17.14           C
ATOM    691  O   LEU A  98      17.535  -8.027  12.052  1.00 17.33           O
ATOM    692  CB  LEU A  98      19.233  -6.259  10.119  1.00 16.85           C
ATOM    693  CG  LEU A  98      18.191  -5.635   9.179  1.00 16.81           C
ATOM    694  CD1 LEU A  98      17.866  -4.182   9.546  1.00 16.35           C
ATOM    695  CD2 LEU A  98      18.647  -5.745   7.721  1.00 16.48           C
ATOM    696  N   MET A  99      16.708  -5.943  12.311  1.00 17.24           N
ATOM    697  CA  MET A  99      15.401  -6.375  12.784  1.00 17.22           C
ATOM    698  C   MET A  99      14.316  -5.915  11.819  1.00 17.29           C
ATOM    699  O   MET A  99      13.894  -4.757  11.862  1.00 17.57           O
ATOM    700  CB  MET A  99      15.140  -5.840  14.195  1.00 17.43           C
ATOM    701  CG  MET A  99      16.186  -6.255  15.218  1.00 17.31           C
ATOM    702  SD  MET A  99      15.708  -7.745  16.087  1.00 17.72           S
ATOM    703  CE  MET A  99      16.339  -9.005  15.021  1.00 18.23           C
ATOM    704  N   PRO A 100      13.871  -6.827  10.953  1.00 17.17           N
ATOM    705  CA  PRO A 100      12.919  -6.506   9.881  1.00 16.97           C
ATOM    706  C   PRO A 100      11.707  -5.698  10.338  1.00 16.82           C
ATOM    707  O   PRO A 100      11.305  -4.766   9.642  1.00 16.79           O
ATOM    708  CB  PRO A 100      12.467  -7.889   9.392  1.00 17.04           C
ATOM    709  CG  PRO A 100      13.611  -8.790   9.692  1.00 16.92           C
ATOM    710  CD  PRO A 100      14.256  -8.252  10.939  1.00 17.04           C
ATOM    711  N   PHE A 101      11.147  -6.042  11.494  1.00 16.80           N
ATOM    712  CA  PHE A 101       9.869  -5.473  11.928  1.00 16.70           C
ATOM    713  C   PHE A 101       9.994  -4.135  12.660  1.00 16.47           C
ATOM    714  O   PHE A 101       8.985  -3.498  12.971  1.00 16.61           O
ATOM    715  CB  PHE A 101       9.089  -6.496  12.764  1.00 16.80           C
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FIG. 4L

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ATOM    716  CG  PHE A 101       9.063  -7.875  12.160  1.00 17.13           C
ATOM    717  CD1 PHE A 101       8.617  -8.073  10.852  1.00 17.47           C
ATOM    718  CE1 PHE A 101       8.600  -9.344  10.286  1.00 17.80           C
ATOM    719  CZ  PHE A 101       9.032 -10.437  11.031  1.00 17.99           C
ATOM    720  CE2 PHE A 101       9.482 -10.252  12.340  1.00 17.77           C
ATOM    721  CD2 PHE A 101       9.495  -8.975  12.894  1.00 17.36           C
ATOM    722  N   GLY A 102      11.231  -3.717  12.926  1.00 16.07           N
ATOM    723  CA  GLY A 102      11.499  -2.428  13.539  1.00 15.74           C
ATOM    724  C   GLY A 102      11.060  -2.335  14.988  1.00 15.51           C
ATOM    725  O   GLY A 102      10.991  -3.348  15.688  1.00 15.56           O
ATOM    726  N   CYS A 103      10.748  -1.115  15.424  1.00 15.09           N
ATOM    727  CA  CYS A 103      10.420  -0.837  16.820  1.00 14.69           C
ATOM    728  C   CYS A 103       8.946  -1.051  17.182  1.00 14.97           C
ATOM    729  O   CYS A 103       8.082  -1.145  16.308  1.00 15.08           O
ATOM    730  CB  CYS A 103      10.858   0.581  17.193  1.00 14.64           C
ATOM    731  SG  CYS A 103       9.883   1.905  16.452  1.00 12.98           S
ATOM    732  N   LEU A 104       8.681  -1.127  18.485  1.00 15.04           N
ATOM    733  CA  LEU A 104       7.341  -1.367  19.016  1.00 15.24           C
ATOM    734  C   LEU A 104       6.437  -0.141  18.910  1.00 15.61           C
ATOM    735  O   LEU A 104       5.214  -0.280  18.815  1.00 15.55           O
ATOM    736  CB  LEU A 104       7.430  -1.847  20.473  1.00 15.21           C
ATOM    737  CG  LEU A 104       6.260  -2.575  21.147  1.00 14.92           C
ATOM    738  CD1 LEU A 104       5.811  -3.816  20.378  1.00 14.92           C
ATOM    739  CD2 LEU A 104       6.644  -2.949  22.566  1.00 14.68           C
ATOM    740  N   LEU A 105       7.039   1.051  18.931  1.00 15.86           N
ATOM    741  CA  LEU A 105       6.289   2.300  18.796  1.00 16.29           C
ATOM    742  C   LEU A 105       5.565   2.395  17.449  1.00 16.67           C
ATOM    743  O   LEU A 105       4.396   2.785  17.394  1.00 16.80           O
ATOM    744  CB  LEU A 105       7.191   3.525  19.017  1.00 16.11           C
ATOM    745  CG  LEU A 105       6.552   4.907  18.805  1.00 16.10           C
ATOM    746  CD1 LEU A 105       5.445   5.170  19.817  1.00 15.96           C
ATOM    747  CD2 LEU A 105       7.591   6.020  18.841  1.00 15.85           C
ATOM    748  N   ASP A 106       6.260   2.039  16.372  1.00 17.10           N
ATOM    749  CA  ASP A 106       5.658   2.012  15.042  1.00 17.60           C
ATOM    750  C   ASP A 106       4.586   0.933  14.951  1.00 17.69           C
ATOM    751  O   ASP A 106       3.544   1.135  14.325  1.00 17.84           O
ATOM    752  CB  ASP A 106       6.722   1.770  13.972  1.00 17.85           C
ATOM    753  CG  ASP A 106       7.574   2.995  13.703  1.00 18.72           C
ATOM    754  OD1 ASP A 106       8.698   2.820  13.184  1.00 19.86           O
ATOM    755  OD2 ASP A 106       7.212   4.164  13.968  1.00 19.60           O
ATOM    756  N   TYR A 107       4.852  -0.205  15.589  1.00 17.77           N
ATOM    757  CA  TYR A 107       3.956  -1.355  15.567  1.00 18.06           C
ATOM    758  C   TYR A 107       2.599  -1.049  16.199  1.00 18.45           C
ATOM    759  O   TYR A 107       1.559  -1.386  15.626  1.00 18.63           O
ATOM    760  CB  TYR A 107       4.612  -2.561  16.255  1.00 17.90           C
ATOM    761  CG  TYR A 107       3.800  -3.834  16.181  1.00 17.51           C
ATOM    762  CD1 TYR A 107       3.975  -4.735  15.133  1.00 17.26           C
ATOM    763  CE1 TYR A 107       3.229  -5.907  15.061  1.00 17.00           C
ATOM    764  CZ  TYR A 107       2.296  -6.185  16.045  1.00 16.88           C
ATOM    765  OH  TYR A 107       1.557  -7.340  15.981  1.00 16.84           O
ATOM    766  CE2 TYR A 107       2.103  -5.307  17.094  1.00 17.36           C
ATOM    767  CD2 TYR A 107       2.855  -4.138  17.160  1.00 17.47           C
ATOM    768  N   VAL A 108       2.615  -0.416  17.372  1.00 18.85           N
ATOM    769  CA  VAL A 108       1.380  -0.072  18.078  1.00 19.41           C
ATOM    770  C   VAL A 108       0.592   1.032  17.360  1.00 19.97           C
ATOM    771  O   VAL A 108      -0.640   1.055  17.409  1.00 19.85           O
ATOM    772  CB  VAL A 108       1.615   0.288  19.580  1.00 19.29           C
ATOM    773  CG1 VAL A 108       2.162  -0.910  20.343  1.00 18.99           C
ATOM    774  CG2 VAL A 108       2.532   1.496  19.741  1.00 19.23           C
ATOM    775  N   ARG A 109       1.312   1.927  16.685  1.00 20.66           N
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FIG. 4M

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ATOM    776  CA  ARG A 109       0.694   2.985  15.891  1.00 21.58           C
ATOM    777  C   ARG A 109      -0.029   2.421  14.669  1.00 22.30           C
ATOM    778  O   ARG A 109      -1.102   2.904  14.306  1.00 22.64           O
ATOM    779  CB  ARG A 109       1.734   4.018  15.459  1.00 21.32           C
ATOM    780  CG  ARG A 109       2.024   5.069  16.511  1.00 20.85           C
ATOM    781  CD  ARG A 109       3.315   5.823  16.284  1.00 20.35           C
ATOM    782  NE  ARG A 109       3.536   6.834  17.313  1.00 19.97           N
ATOM    783  CZ  ARG A 109       4.261   7.935  17.147  1.00 19.50           C
ATOM    784  NH1 ARG A 109       4.848   8.186  15.983  1.00 18.73           N
ATOM    785  NH2 ARG A 109       4.397   8.791  18.150  1.00 19.22           N
ATOM    786  N   GLU A 110       0.560   1.399  14.047  1.00 23.05           N
ATOM    787  CA  GLU A 110      -0.053   0.732  12.900  1.00 23.62           C
ATOM    788  C   GLU A 110      -1.249  -0.135  13.300  1.00 23.88           C
ATOM    789  O   GLU A 110      -2.188  -0.296  12.519  1.00 24.16           O
ATOM    790  CB  GLU A 110       0.978  -0.097  12.125  1.00 23.71           C
ATOM    791  CG  GLU A 110       0.663  -0.221  10.640  1.00 24.25           C
ATOM    792  CD  GLU A 110       1.781  -0.859   9.837  1.00 24.51           C
ATOM    793  OE1 GLU A 110       1.796  -2.101   9.716  1.00 25.02           O
ATOM    794  OE2 GLU A 110       2.636  -0.120   9.308  1.00 24.74           O
ATOM    795  N   HIS A 111      -1.211  -0.686  14.513  1.00 24.14           N
ATOM    796  CA  HIS A 111      -2.284  -1.555  15.009  1.00 24.29           C
ATOM    797  C   HIS A 111      -3.073  -0.928  16.169  1.00 24.39           C
ATOM    798  O   HIS A 111      -3.360  -1.589  17.172  1.00 24.14           O
ATOM    799  CB  HIS A 111      -1.725  -2.927  15.406  1.00 24.23           C
ATOM    800  CG  HIS A 111      -1.061  -3.658  14.281  1.00 24.34           C
ATOM    801  ND1 HIS A 111       0.307  -3.801  14.191  1.00 24.43           N
ATOM    802  CE1 HIS A 111       0.605  -4.483  13.099  1.00 24.21           C
ATOM    803  NE2 HIS A 111      -0.519  -4.787  12.478  1.00 24.25           N
ATOM    804  CD2 HIS A 111      -1.577  -4.284  13.196  1.00 24.27           C
ATOM    805  N   LYS A 112      -3.423   0.349  16.014  1.00 24.75           N
ATOM    806  CA  LYS A 112      -4.198   1.087  17.014  1.00 25.07           C
ATOM    807  C   LYS A 112      -5.543   0.413  17.301  1.00 25.32           C
ATOM    808  O   LYS A 112      -6.367   0.235  16.395  1.00 25.54           O
ATOM    809  CB  LYS A 112      -4.419   2.533  16.565  1.00 24.93           C
ATOM    810  CG  LYS A 112      -3.216   3.434  16.762  1.00 25.39           C
ATOM    811  CD  LYS A 112      -3.415   4.786  16.093  1.00 25.76           C
ATOM    812  CE  LYS A 112      -2.172   5.652  16.216  1.00 25.95           C
ATOM    813  NZ  LYS A 112      -2.035   6.247  17.578  1.00 26.44           N
ATOM    814  N   ASP A 113      -5.739   0.035  18.564  1.00 25.33           N
ATOM    815  CA  ASP A 113      -6.950  -0.651  19.028  1.00 25.33           C
ATOM    816  C   ASP A 113      -7.201  -1.987  18.312  1.00 25.23           C
ATOM    817  O   ASP A 113      -8.350  -2.384  18.093  1.00 25.58           O
ATOM    818  CB  ASP A 113      -8.173   0.276  18.940  1.00 25.39           C
ATOM    819  N   ASN A 114      -6.113  -2.671  17.960  1.00 24.90           N
ATOM    820  CA  ASN A 114      -6.171  -3.981  17.314  1.00 24.46           C
ATOM    821  C   ASN A 114      -5.196  -4.980  17.950  1.00 24.25           C
ATOM    822  O   ASN A 114      -5.069  -6.119  17.500  1.00 24.20           O
ATOM    823  CB  ASN A 114      -5.912  -3.847  15.810  1.00 24.64           C
ATOM    824  CG  ASN A 114      -6.504  -4.993  15.008  1.00 24.41           C
ATOM    825  OD1 ASN A 114      -7.719  -5.201  14.996  1.00 24.43           O
ATOM    826  ND2 ASN A 114      -5.643  -5.743  14.330  1.00 24.11           N
ATOM    827  N   ILE A 115      -4.505  -4.533  18.995  1.00 24.08           N
ATOM    828  CA  ILE A 115      -3.672  -5.405  19.818  1.00 23.73           C
ATOM    829  C   ILE A 115      -4.448  -5.786  21.078  1.00 23.47           C
ATOM    830  O   ILE A 115      -5.055  -4.929  21.725  1.00 23.56           O
ATOM    831  CB  ILE A 115      -2.343  -4.708  20.193  1.00 23.74           C
ATOM    832  CG1 ILE A 115      -1.615  -4.209  18.941  1.00 23.87           C
ATOM    833  CD1 ILE A 115      -0.899  -2.891  19.135  1.00 23.85           C
ATOM    834  CG2 ILE A 115      -1.441  -5.653  20.983  1.00 23.98           C
ATOM    835  N   GLY A 116      -4.429  -7.073  21.415  1.00 22.94           N
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FIG. 4N

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ATOM    836  CA  GLY A 116      -5.103  -7.573  22.599  1.00 22.60           C
ATOM    837  C   GLY A 116      -4.396  -7.208  23.892  1.00 22.40           C
ATOM    838  O   GLY A 116      -3.251  -6.747  23.878  1.00 22.38           O
ATOM    839  N   SER A 117      -5.088  -7.422  25.009  1.00 22.12           N
ATOM    840  CA  SER A 117      -4.558  -7.114  26.339  1.00 21.83           C
ATOM    841  C   SER A 117      -3.441  -8.064  26.751  1.00 21.57           C
ATOM    842  O   SER A 117      -2.580  -7.702  27.555  1.00 21.49           O
ATOM    843  CB  SER A 117      -5.676  -7.138  27.390  1.00 21.91           C
ATOM    844  OG  SER A 117      -6.555  -8.235  27.193  1.00 21.91           O
ATOM    845  N   GLN A 118      -3.465  -9.276  26.201  1.00 21.34           N
ATOM    846  CA  GLN A 118      -2.458 -10.287  26.503  1.00 21.12           C
ATOM    847  C   GLN A 118      -1.077  -9.861  26.002  1.00 21.11           C
ATOM    848  O   GLN A 118      -0.097  -9.964  26.733  1.00 20.98           O
ATOM    849  CB  GLN A 118      -2.864 -11.650  25.925  1.00 20.93           C
ATOM    850  CG  GLN A 118      -1.952 -12.816  26.314  1.00 21.00           C
ATOM    851  CD  GLN A 118      -1.973 -13.123  27.805  1.00 20.93           C
ATOM    852  OE1 GLN A 118      -1.174 -12.577  28.568  1.00 21.15           O
ATOM    853  NE2 GLN A 118      -2.881 -13.997  28.219  1.00 20.38           N
ATOM    854  N   TYR A 119      -1.018  -9.368  24.766  1.00 21.15           N
ATOM    855  CA  TYR A 119       0.232  -8.915  24.156  1.00 21.24           C
ATOM    856  C   TYR A 119       0.756  -7.623  24.783  1.00 21.05           C
ATOM    857  O   TYR A 119       1.967  -7.455  24.936  1.00 20.83           O
ATOM    858  CB  TYR A 119       0.060  -8.735  22.643  1.00 21.58           C
ATOM    859  CG  TYR A 119       0.053 -10.033  21.872  1.00 22.24           C
ATOM    860  CD1 TYR A 119       1.206 -10.498  21.246  1.00 22.59           C
ATOM    861  CE1 TYR A 119       1.206 -11.698  20.537  1.00 23.26           C
ATOM    862  CZ  TYR A 119       0.040 -12.441  20.453  1.00 23.55           C
ATOM    863  OH  TYR A 119       0.031 -13.629  19.757  1.00 24.38           O
ATOM    864  CE2 TYR A 119      -1.120 -11.998  21.067  1.00 23.26           C
ATOM    865  CD2 TYR A 119      -1.110 -10.800  21.770  1.00 22.85           C
ATOM    866  N   LEU A 120      -0.158  -6.721  25.140  1.00 20.87           N
ATOM    867  CA  LEU A 120       0.202  -5.445  25.759  1.00 20.64           C
ATOM    868  C   LEU A 120       0.861  -5.637  27.121  1.00 20.48           C
ATOM    869  O   LEU A 120       1.908  -5.046  27.397  1.00 20.68           O
ATOM    870  CB  LEU A 120      -1.022  -4.533  25.896  1.00 20.53           C
ATOM    871  CG  LEU A 120      -1.410  -3.673  24.690  1.00 20.55           C
ATOM    872  CD1 LEU A 120      -2.808  -3.095  24.882  1.00 20.39           C
ATOM    873  CD2 LEU A 120      -0.393  -2.563  24.434  1.00 20.42           C
ATOM    874  N   LEU A 121       0.248  -6.469  27.960  1.00 19.98           N
ATOM    875  CA  LEU A 121       0.778  -6.746  29.293  1.00 19.62           C
ATOM    876  C   LEU A 121       2.035  -7.613  29.242  1.00 19.36           C
ATOM    877  O   LEU A 121       2.931  -7.460  30.076  1.00 19.37           O
ATOM    878  CB  LEU A 121      -0.290  -7.386  30.186  1.00 19.64           C
ATOM    879  CG  LEU A 121      -1.394  -6.440  30.667  1.00 19.34           C
ATOM    880  CD1 LEU A 121      -2.681  -7.200  30.946  1.00 18.84           C
ATOM    881  CD2 LEU A 121      -0.955  -5.646  31.887  1.00 19.08           C
ATOM    882  N   ASN A 122       2.094  -8.512  28.260  1.00 18.94           N
ATOM    883  CA  ASN A 122       3.278  -9.332  28.014  1.00 18.57           C
ATOM    884  C   ASN A 122       4.501  -8.479  27.681  1.00 18.33           C
ATOM    885  O   ASN A 122       5.601  -8.749  28.167  1.00 18.13           O
ATOM    886  CB  ASN A 122       3.019 -10.332  26.882  1.00 18.68           C
ATOM    887  CG  ASN A 122       2.368 -11.624  27.364  1.00 18.94           C
ATOM    888  OD1 ASN A 122       2.342 -12.618  26.639  1.00 19.98           O
ATOM    889  ND2 ASN A 122       1.828 -11.611  28.576  1.00 18.77           N
ATOM    890  N   TRP A 123       4.294  -7.447  26.861  1.00 18.03           N
ATOM    891  CA  TRP A 123       5.358  -6.516  26.482  1.00 17.83           C
ATOM    892  C   TRP A 123       5.942  -5.801  27.703  1.00 17.55           C
ATOM    893  O   TRP A 123       7.167  -5.709  27.846  1.00 17.38           O
ATOM    894  CB  TRP A 123       4.860  -5.507  25.436  1.00 17.78           C
ATOM    895  CG  TRP A 123       4.534  -6.123  24.092  1.00 18.02           C
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FIG. 4O

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ATOM    896  CD1 TRP A 123       5.027  -7.295  23.579  1.00 18.24           C
ATOM    897  NE1 TRP A 123       4.499  -7.529  22.331  1.00 18.13           N
ATOM    898  CE2 TRP A 123       3.642  -6.509  22.011  1.00 17.96           C
ATOM    899  CD2 TRP A 123       3.639  -5.603  23.098  1.00 18.22           C
ATOM    900  CE3 TRP A 123       2.831  -4.458  23.011  1.00 18.14           C
ATOM    901  CZ3 TRP A 123       2.069  -4.257  21.864  1.00 17.77           C
ATOM    902  CH2 TRP A 123       2.100  -5.177  20.804  1.00 18.00           C
ATOM    903  CZ2 TRP A 123       2.877  -6.306  20.859  1.00 17.93           C
ATOM    904  N   CYS A 124       5.062  -5.323  28.585  1.00 17.03           N
ATOM    905  CA  CYS A 124       5.471  -4.704  29.847  1.00 16.59           C
ATOM    906  C   CYS A 124       6.273  -5.674  30.718  1.00 16.58           C
ATOM    907  O   CYS A 124       7.219  -5.262  31.394  1.00 16.52           O
ATOM    908  CB  CYS A 124       4.257  -4.175  30.617  1.00 16.60           C
ATOM    909  SG  CYS A 124       3.203  -3.031  29.689  1.00 15.92           S
ATOM    910  N   VAL A 125       5.896  -6.956  30.693  1.00 16.20           N
ATOM    911  CA  VAL A 125       6.645  -8.005  31.388  1.00 15.83           C
ATOM    912  C   VAL A 125       8.038  -8.155  30.773  1.00 15.49           C
ATOM    913  O   VAL A 125       9.040  -8.194  31.491  1.00 15.37           O
ATOM    914  CB  VAL A 125       5.918  -9.386  31.349  1.00 15.89           C
ATOM    915  CG1 VAL A 125       6.772 -10.476  31.989  1.00 15.63           C
ATOM    916  CG2 VAL A 125       4.573  -9.320  32.036  1.00 16.05           C
ATOM    917  N   GLN A 126       8.087  -8.228  29.444  1.00 15.03           N
ATOM    918  CA  GLN A 126       9.329  -8.499  28.722  1.00 14.63           C
ATOM    919  C   GLN A 126      10.327  -7.345  28.800  1.00 14.22           C
ATOM    920  O   GLN A 126      11.527  -7.572  28.907  1.00 14.18           O
ATOM    921  CB  GLN A 126       9.041  -8.886  27.267  1.00 14.73           C
ATOM    922  CG  GLN A 126       8.420 -10.273  27.113  1.00 14.70           C
ATOM    923  CD  GLN A 126       8.163 -10.676  25.667  1.00 15.18           C
ATOM    924  OE1 GLN A 126       8.143  -9.839  24.771  1.00 15.11           O
ATOM    925  NE2 GLN A 126       7.957 -11.970  25.445  1.00 16.09           N
ATOM    926  N   ILE A 127       9.827  -6.112  28.761  1.00 14.17           N
ATOM    927  CA  ILE A 127      10.682  -4.931  28.897  1.00 13.74           C
ATOM    928  C   ILE A 127      11.219  -4.811  30.329  1.00 13.55           C
ATOM    929  O   ILE A 127      12.400  -4.510  30.529  1.00 13.38           O
ATOM    930  CB  ILE A 127       9.947  -3.642  28.437  1.00 13.70           C
ATOM    931  CG1 ILE A 127       9.651  -3.704  26.936  1.00 13.47           C
ATOM    932  CD1 ILE A 127       8.417  -2.941  26.507  1.00 13.43           C
ATOM    933  CG2 ILE A 127      10.777  -2.395  28.749  1.00 14.06           C
ATOM    934  N   ALA A 128      10.360  -5.069  31.315  1.00 13.26           N
ATOM    935  CA  ALA A 128      10.782  -5.073  32.717  1.00 13.19           C
ATOM    936  C   ALA A 128      11.834  -6.150  32.984  1.00 13.12           C
ATOM    937  O   ALA A 128      12.792  -5.915  33.717  1.00 12.89           O
ATOM    938  CB  ALA A 128       9.589  -5.247  33.642  1.00 13.22           C
ATOM    939  N   LYS A 129      11.646  -7.321  32.375  1.00 13.39           N
ATOM    940  CA  LYS A 129      12.597  -8.428  32.465  1.00 13.63           C
ATOM    941  C   LYS A 129      13.982  -8.029  31.962  1.00 13.65           C
ATOM    942  O   LYS A 129      14.983  -8.263  32.641  1.00 13.64           O
ATOM    943  CB  LYS A 129      12.090  -9.633  31.670  1.00 13.64           C
ATOM    944  CG  LYS A 129      11.708 -10.826  32.521  1.00 14.06           C
ATOM    945  CD  LYS A 129      10.474 -11.522  31.974  1.00 14.78           C
ATOM    946  CE  LYS A 129      10.846 -12.768  31.189  1.00 15.45           C
ATOM    947  NZ  LYS A 129       9.872 -13.028  30.096  1.00 16.44           N
ATOM    948  N   GLY A 130      14.023  -7.427  30.773  1.00 13.68           N
ATOM    949  CA  GLY A 130      15.263  -6.989  30.155  1.00 13.85           C
ATOM    950  C   GLY A 130      15.910  -5.800  30.847  1.00 13.91           C
ATOM    951  O   GLY A 130      17.134  -5.673  30.850  1.00 13.92           O
ATOM    952  N   MET A 131      15.086  -4.924  31.421  1.00 14.05           N
ATOM    953  CA  MET A 131      15.578  -3.790  32.200  1.00 14.04           C
ATOM    954  C   MET A 131      16.183  -4.253  33.521  1.00 13.87           C
ATOM    955  O   MET A 131      17.202  -3.722  33.954  1.00 14.02           O
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FIG. 4P

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ATOM    956  CB  MET A 131      14.464  -2.772  32.458  1.00 14.17           C
ATOM    957  CG  MET A 131      14.115  -1.875  31.268  1.00 14.47           C
ATOM    958  SD  MET A 131      15.527  -1.154  30.395  1.00 14.30           S
ATOM    959  CE  MET A 131      16.077   0.063  31.559  1.00 14.66           C
ATOM    960  N   ASN A 132      15.557  -5.248  34.149  1.00 14.00           N
ATOM    961  CA  ASN A 132      16.097  -5.870  35.361  1.00 14.12           C
ATOM    962  C   ASN A 132      17.455  -6.520  35.126  1.00 14.16           C
ATOM    963  O   ASN A 132      18.321  -6.488  36.003  1.00 13.96           O
ATOM    964  CB  ASN A 132      15.118  -6.895  35.943  1.00 14.01           C
ATOM    965  CG  ASN A 132      15.664  -7.590  37.181  1.00 13.85           C
ATOM    966  OD1 ASN A 132      15.927  -6.950  38.195  1.00 13.94           O
ATOM    967  ND2 ASN A 132      15.851  -8.904  37.094  1.00 13.83           N
ATOM    968  N   TYR A 133      17.631  -7.100  33.941  1.00 14.46           N
ATOM    969  CA  TYR A 133      18.905  -7.695  33.546  1.00 14.93           C
ATOM    970  C   TYR A 133      20.013  -6.653  33.499  1.00 15.03           C
ATOM    971  O   TYR A 133      21.098  -6.870  34.041  1.00 15.09           O
ATOM    972  CB  TYR A 133      18.794  -8.392  32.190  1.00 14.86           C
ATOM    973  CG  TYR A 133      20.109  -8.961  31.712  1.00 15.45           C
ATOM    974  CD1 TYR A 133      20.586 -10.174  32.207  1.00 15.42           C
ATOM    975  CE1 TYR A 133      21.798 -10.697  31.777  1.00 15.95           C
ATOM    976  CZ  TYR A 133      22.551 -10.005  30.844  1.00 16.11           C
ATOM    977  OH  TYR A 133      23.750 -10.524  30.415  1.00 16.45           O
ATOM    978  CE2 TYR A 133      22.105  -8.793  30.343  1.00 16.01           C
ATOM    979  CD2 TYR A 133      20.889  -8.278  30.777  1.00 15.79           C
ATOM    980  N   LEU A 134      19.728  -5.529  32.842  1.00 15.43           N
ATOM    981  CA  LEU A 134      20.669  -4.415  32.734  1.00 15.54           C
ATOM    982  C   LEU A 134      21.023  -3.873  34.116  1.00 15.53           C
ATOM    983  O   LEU A 134      22.183  -3.563  34.384  1.00 15.60           O
ATOM    984  CB  LEU A 134      20.100  -3.303  31.841  1.00 15.46           C
ATOM    985  CG  LEU A 134      19.903  -3.594  30.345  1.00 15.60           C
ATOM    986  CD1 LEU A 134      19.222  -2.421  29.644  1.00 15.26           C
ATOM    987  CD2 LEU A 134      21.213  -3.952  29.638  1.00 15.39           C
ATOM    988  N   GLU A 135      20.020  -3.775  34.987  1.00 15.59           N
ATOM    989  CA  GLU A 135      20.238  -3.406  36.384  1.00 15.71           C
ATOM    990  C   GLU A 135      21.181  -4.399  37.068  1.00 15.74           C
ATOM    991  O   GLU A 135      22.108  -3.989  37.772  1.00 15.87           O
ATOM    992  CB  GLU A 135      18.906  -3.305  37.141  1.00 15.64           C
ATOM    993  CG  GLU A 135      19.044  -3.244  38.658  1.00 15.90           C
ATOM    994  CD  GLU A 135      18.038  -2.323  39.327  1.00 16.38           C
ATOM    995  OE1 GLU A 135      18.386  -1.738  40.371  1.00 16.68           O
ATOM    996  OE2 GLU A 135      16.899  -2.185  38.828  1.00 17.01           O
ATOM    997  N   ASP A 136      20.948  -5.695  36.843  1.00 15.53           N
ATOM    998  CA  ASP A 136      21.761  -6.757  37.437  1.00 15.42           C
ATOM    999  C   ASP A 136      23.209  -6.723  36.945  1.00 15.65           C
ATOM   1000  O   ASP A 136      24.124  -7.130  37.661  1.00 15.81           O
ATOM   1001  CB  ASP A 136      21.142  -8.133  37.173  1.00 15.08           C
ATOM   1002  CG  ASP A 136      20.075  -8.506  38.195  1.00 14.79           C
ATOM   1003  OD1 ASP A 136      19.203  -9.333  37.857  1.00 14.50           O
ATOM   1004  OD2 ASP A 136      20.021  -8.035  39.353  1.00 13.86           O
ATOM   1005  N   ARG A 137      23.405  -6.229  35.724  1.00 15.75           N
ATOM   1006  CA  ARG A 137      24.738  -6.055  35.158  1.00 15.75           C
ATOM   1007  C   ARG A 137      25.296  -4.665  35.479  1.00 16.06           C
ATOM   1008  O   ARG A 137      26.324  -4.257  34.930  1.00 16.25           O
ATOM   1009  CB  ARG A 137      24.714  -6.298  33.642  1.00 15.43           C
ATOM   1010  CG  ARG A 137      24.445  -7.748  33.236  1.00 15.41           C
ATOM   1011  CD  ARG A 137      25.674  -8.653  33.240  1.00 15.00           C
ATOM   1012  NE  ARG A 137      26.361  -8.648  31.950  1.00 15.35           N
ATOM   1013  CZ  ARG A 137      27.624  -8.270  31.767  1.00 16.00           C
ATOM   1014  NH1 ARG A 137      28.368  -7.863  32.787  1.00 16.20           N
ATOM   1015  NH2 ARG A 137      28.150  -8.300  30.554  1.00 16.19           N
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FIG. 4Q

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ATOM   1016  N   ARG A 138      24.610  -3.953  36.377  1.00 16.30           N
ATOM   1017  CA  ARG A 138      24.972  -2.591  36.795  1.00 16.39           C
ATOM   1018  C   ARG A 138      25.133  -1.644  35.603  1.00 16.43           C
ATOM   1019  O   ARG A 138      26.125  -0.919  35.493  1.00 16.47           O
ATOM   1020  CB  ARG A 138      26.220  -2.593  37.694  1.00 16.44           C
ATOM   1021  CG  ARG A 138      26.096  -3.448  38.962  1.00 16.86           C
ATOM   1022  CD  ARG A 138      25.064  -2.933  39.960  1.00 17.57           C
ATOM   1023  NE  ARG A 138      24.744  -3.899  41.012  1.00 17.41           N
ATOM   1024  CZ  ARG A 138      23.510  -4.217  41.394  1.00 17.24           C
ATOM   1025  NH1 ARG A 138      22.457  -3.668  40.803  1.00 16.80           N
ATOM   1026  NH2 ARG A 138      23.326  -5.096  42.371  1.00 17.60           N
ATOM   1027  N   LEU A 139      24.142  -1.669  34.713  1.00 16.41           N
ATOM   1028  CA  LEU A 139      24.147  -0.849  33.503  1.00 16.25           C
ATOM   1029  C   LEU A 139      22.907   0.032  33.428  1.00 16.12           C
ATOM   1030  O   LEU A 139      21.777  -0.466  33.401  1.00 16.11           O
ATOM   1031  CB  LEU A 139      24.232  -1.727  32.249  1.00 16.18           C
ATOM   1032  CG  LEU A 139      25.393  -2.719  32.103  1.00 16.35           C
ATOM   1033  CD1 LEU A 139      25.139  -3.640  30.920  1.00 16.00           C
ATOM   1034  CD2 LEU A 139      26.739  -2.003  31.956  1.00 16.32           C
ATOM   1035  N   VAL A 140      23.127   1.343  33.406  1.00 15.91           N
ATOM   1036  CA  VAL A 140      22.040   2.305  33.255  1.00 15.76           C
ATOM   1037  C   VAL A 140      21.759   2.479  31.765  1.00 15.77           C
ATOM   1038  O   VAL A 140      22.687   2.597  30.965  1.00 16.09           O
ATOM   1039  CB  VAL A 140      22.373   3.659  33.931  1.00 15.73           C
ATOM   1040  CG1 VAL A 140      21.219   4.655  33.782  1.00 15.53           C
ATOM   1041  CG2 VAL A 140      22.706   3.451  35.408  1.00 15.49           C
ATOM   1042  N   HIS A 141      20.481   2.466  31.398  1.00 15.61           N
ATOM   1043  CA  HIS A 141      20.083   2.592  29.999  1.00 15.51           C
ATOM   1044  C   HIS A 141      20.237   4.021  29.485  1.00 15.35           C
ATOM   1045  O   HIS A 141      20.917   4.249  28.483  1.00 15.17           O
ATOM   1046  CB  HIS A 141      18.648   2.099  29.786  1.00 15.44           C
ATOM   1047  CG  HIS A 141      18.279   1.941  28.345  1.00 15.37           C
ATOM   1048  ND1 HIS A 141      18.061   0.711  27.764  1.00 15.41           N
ATOM   1049  CE1 HIS A 141      17.766   0.879  26.486  1.00 15.73           C
ATOM   1050  NE2 HIS A 141      17.786   2.172  26.218  1.00 15.30           N
ATOM   1051  CD2 HIS A 141      18.109   2.858  27.363  1.00 15.35           C
ATOM   1052  N   ARG A 142      19.577   4.966  30.159  1.00 15.30           N
ATOM   1053  CA  ARG A 142      19.722   6.399  29.885  1.00 15.16           C
ATOM   1054  C   ARG A 142      18.887   6.934  28.711  1.00 14.70           C
ATOM   1055  O   ARG A 142      18.870   8.145  28.468  1.00 14.69           O
ATOM   1056  CB  ARG A 142      21.199   6.749  29.680  1.00 15.59           C
ATOM   1057  CG  ARG A 142      21.635   8.016  30.338  1.00 16.40           C
ATOM   1058  CD  ARG A 142      23.099   8.312  30.154  1.00 18.03           C
ATOM   1059  NE  ARG A 142      23.907   7.603  31.138  1.00 19.00           N
ATOM   1060  CZ  ARG A 142      24.785   8.185  31.940  1.00 19.30           C
ATOM   1061  NH1 ARG A 142      24.980   9.495  31.878  1.00 19.43           N
ATOM   1062  NH2 ARG A 142      25.471   7.454  32.808  1.00 19.76           N
ATOM   1063  N   ASP A 143      18.198   6.042  27.997  1.00 13.94           N
ATOM   1064  CA  ASP A 143      17.387   6.430  26.837  1.00 13.35           C
ATOM   1065  C   ASP A 143      16.296   5.402  26.491  1.00 13.04           C
ATOM   1066  O   ASP A 143      16.093   5.060  25.323  1.00 12.50           O
ATOM   1067  CB  ASP A 143      18.292   6.691  25.623  1.00 13.48           C
ATOM   1068  CG  ASP A 143      17.555   7.329  24.455  1.00 13.74           C
ATOM   1069  OD1 ASP A 143      16.493   7.965  24.657  1.00 13.89           O
ATOM   1070  OD2 ASP A 143      17.975   7.239  23.287  1.00 13.81           O
ATOM   1071  N   LEU A 144      15.596   4.911  27.510  1.00 12.63           N
ATOM   1072  CA  LEU A 144      14.526   3.949  27.286  1.00 12.23           C
ATOM   1073  C   LEU A 144      13.273   4.650  26.767  1.00 12.03           C
ATOM   1074  O   LEU A 144      12.858   5.688  27.293  1.00 11.80           O
ATOM   1075  CB  LEU A 144      14.227   3.128  28.549  1.00 12.33           C
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FIG. 4R

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ATOM   1076  CG  LEU A 144      13.240   1.955  28.416  1.00 12.30           C
ATOM   1077  CD1 LEU A 144      13.783   0.833  27.522  1.00 11.94           C
ATOM   1078  CD2 LEU A 144      12.867   1.415  29.784  1.00 12.32           C
ATOM   1079  N   ALA A 145      12.698   4.063  25.721  1.00 11.66           N
ATOM   1080  CA  ALA A 145      11.527   4.589  25.030  1.00 11.54           C
ATOM   1081  C   ALA A 145      10.880   3.441  24.266  1.00 11.51           C
ATOM   1082  O   ALA A 145      11.500   2.385  24.093  1.00 11.58           O
ATOM   1083  CB  ALA A 145      11.934   5.705  24.070  1.00 11.25           C
ATOM   1084  N   ALA A 146       9.643   3.637  23.809  1.00 11.22           N
ATOM   1085  CA  ALA A 146       8.981   2.635  22.974  1.00 11.36           C
ATOM   1086  C   ALA A 146       9.666   2.531  21.612  1.00 11.56           C
ATOM   1087  O   ALA A 146       9.609   1.485  20.955  1.00 11.93           O
ATOM   1088  CB  ALA A 146       7.502   2.942  22.816  1.00 11.16           C
ATOM   1089  N   ARG A 147      10.317   3.619  21.203  1.00 11.49           N
ATOM   1090  CA  ARG A 147      11.093   3.644  19.968  1.00 11.56           C
ATOM   1091  C   ARG A 147      12.376   2.819  20.100  1.00 12.09           C
ATOM   1092  O   ARG A 147      12.922   2.354  19.099  1.00 12.37           O
ATOM   1093  CB  ARG A 147      11.402   5.090  19.534  1.00 11.01           C
ATOM   1094  CG  ARG A 147      12.485   5.802  20.341  1.00  9.48           C
ATOM   1095  CD  ARG A 147      12.519   7.316  20.171  1.00  7.47           C
ATOM   1096  NE  ARG A 147      13.431   7.949  21.123  1.00  5.04           N
ATOM   1097  CZ  ARG A 147      13.052   8.633  22.202  1.00  5.82           C
ATOM   1098  NH1 ARG A 147      11.765   8.791  22.483  1.00  5.76           N
ATOM   1099  NH2 ARG A 147      13.965   9.165  23.008  1.00  5.16           N
ATOM   1100  N   ASN A 148      12.846   2.641  21.333  1.00 12.61           N
ATOM   1101  CA  ASN A 148      14.078   1.897  21.590  1.00 13.19           C
ATOM   1102  C   ASN A 148      13.822   0.468  22.070  1.00 13.54           C
ATOM   1103  O   ASN A 148      14.684  -0.164  22.680  1.00 13.69           O
ATOM   1104  CB  ASN A 148      14.989   2.671  22.550  1.00 13.15           C
ATOM   1105  CG  ASN A 148      15.726   3.813  21.861  1.00 13.53           C
ATOM   1106  OD1 ASN A 148      15.887   3.816  20.640  1.00 13.84           O
ATOM   1107  ND2 ASN A 148      16.176   4.790  22.644  1.00 13.47           N
ATOM   1108  N   VAL A 149      12.620  -0.025  21.787  1.00 14.09           N
ATOM   1109  CA  VAL A 149      12.273  -1.429  21.973  1.00 14.37           C
ATOM   1110  C   VAL A 149      11.944  -1.994  20.597  1.00 14.62           C
ATOM   1111  O   VAL A 149      11.054  -1.483  19.910  1.00 14.75           O
ATOM   1112  CB  VAL A 149      11.064  -1.612  22.922  1.00 14.42           C
ATOM   1113  CG1 VAL A 149      10.720  -3.089  23.082  1.00 14.46           C
ATOM   1114  CG2 VAL A 149      11.335  -0.981  24.281  1.00 14.24           C
ATOM   1115  N   LEU A 150      12.667  -3.036  20.195  1.00 14.74           N
ATOM   1116  CA  LEU A 150      12.506  -3.622  18.866  1.00 14.99           C
ATOM   1117  C   LEU A 150      11.660  -4.894  18.875  1.00 15.26           C
ATOM   1118  O   LEU A 150      11.748  -5.709  19.795  1.00 15.33           O
ATOM   1119  CB  LEU A 150      13.872  -3.900  18.225  1.00 15.05           C
ATOM   1120  CG  LEU A 150      14.788  -2.723  17.865  1.00 15.07           C
ATOM   1121  CD1 LEU A 150      16.191  -3.229  17.582  1.00 15.01           C
ATOM   1122  CD2 LEU A 150      14.261  -1.924  16.673  1.00 15.24           C
ATOM   1123  N   VAL A 151      10.856  -5.059  17.827  1.00 15.71           N
ATOM   1124  CA  VAL A 151       9.973  -6.213  17.680  1.00 16.00           C
ATOM   1125  C   VAL A 151      10.694  -7.394  17.025  1.00 16.38           C
ATOM   1126  O   VAL A 151      10.889  -7.408  15.809  1.00 16.66           O
ATOM   1127  CB  VAL A 151       8.708  -5.856  16.849  1.00 15.94           C
ATOM   1128  CG1 VAL A 151       7.722  -7.018  16.821  1.00 15.70           C
ATOM   1129  CG2 VAL A 151       8.035  -4.600  17.389  1.00 15.48           C
ATOM   1130  N   LYS A 152      11.087  -8.377  17.834  1.00 16.71           N
ATOM   1131  CA  LYS A 152      11.634  -9.631  17.313  1.00 17.11           C
ATOM   1132  C   LYS A 152      10.521 -10.398  16.607  1.00 17.51           C
ATOM   1133  O   LYS A 152      10.658 -10.773  15.438  1.00 17.61           O
ATOM   1134  CB  LYS A 152      12.246 -10.476  18.437  1.00 17.15           C
ATOM   1135  CG  LYS A 152      13.295 -11.482  17.975  1.00 16.68           C
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FIG. 4S

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ATOM   1136  N   THR A 153       9.431 -10.631  17.341  1.00 17.88           N
ATOM   1137  CA  THR A 153       8.164 -11.139  16.806  1.00 18.19           C
ATOM   1138  C   THR A 153       7.038 -10.433  17.570  1.00 18.52           C
ATOM   1139  O   THR A 153       7.300  -9.834  18.615  1.00 18.53           O
ATOM   1140  CB  THR A 153       8.037 -12.685  16.981  1.00 18.12           C
ATOM   1141  OG1 THR A 153       7.904 -13.012  18.371  1.00 18.04           O
ATOM   1142  CG2 THR A 153       9.307 -13.423  16.553  1.00 18.27           C
ATOM   1143  N   PRO A 154       5.795 -10.493  17.082  1.00 18.87           N
ATOM   1144  CA  PRO A 154       4.659  -9.917  17.818  1.00 19.12           C
ATOM   1145  C   PRO A 154       4.620 -10.297  19.307  1.00 19.43           C
ATOM   1146  O   PRO A 154       4.094  -9.530  20.114  1.00 19.21           O
ATOM   1147  CB  PRO A 154       3.447 -10.499  17.089  1.00 19.02           C
ATOM   1148  CG  PRO A 154       3.913 -10.688  15.702  1.00 18.89           C
ATOM   1149  CD  PRO A 154       5.364 -11.076  15.796  1.00 18.96           C
ATOM   1150  N   GLN A 155       5.182 -11.452  19.659  1.00 19.97           N
ATOM   1151  CA  GLN A 155       5.165 -11.932  21.043  1.00 20.54           C
ATOM   1152  C   GLN A 155       6.540 -11.902  21.728  1.00 20.48           C
ATOM   1153  O   GLN A 155       6.698 -12.395  22.849  1.00 20.38           O
ATOM   1154  CB  GLN A 155       4.531 -13.333  21.131  1.00 20.84           C
ATOM   1155  CG  GLN A 155       5.085 -14.375  20.160  1.00 21.92           C
ATOM   1156  CD  GLN A 155       4.441 -14.315  18.777  1.00 23.72           C
ATOM   1157  OE1 GLN A 155       5.141 -14.391  17.760  1.00 24.36           O
ATOM   1158  NE2 GLN A 155       3.114 -14.177  18.735  1.00 23.67           N
ATOM   1159  N   HIS A 156       7.522 -11.303  21.057  1.00 20.46           N
ATOM   1160  CA  HIS A 156       8.882 -11.203  21.582  1.00 20.45           C
ATOM   1161  C   HIS A 156       9.462  -9.819  21.287  1.00 20.43           C
ATOM   1162  O   HIS A 156       9.701  -9.478  20.130  1.00 20.54           O
ATOM   1163  CB  HIS A 156       9.757 -12.299  20.963  1.00 20.35           C
ATOM   1164  CG  HIS A 156      11.064 -12.512  21.661  1.00 20.28           C
ATOM   1165  ND1 HIS A 156      11.423 -13.726  22.208  1.00 20.15           N
ATOM   1166  CE1 HIS A 156      12.625 -13.626  22.747  1.00 19.81           C
ATOM   1167  NE2 HIS A 156      13.062 -12.393  22.563  1.00 19.97           N
ATOM   1168  CD2 HIS A 156      12.107 -11.678  21.882  1.00 20.26           C
ATOM   1169  N   VAL A 157       9.675  -9.026  22.335  1.00 20.36           N
ATOM   1170  CA  VAL A 157      10.275  -7.695  22.191  1.00 20.44           C
ATOM   1171  C   VAL A 157      11.646  -7.604  22.868  1.00 20.70           C
ATOM   1172  O   VAL A 157      11.932  -8.330  23.826  1.00 20.82           O
ATOM   1173  CB  VAL A 157       9.347  -6.553  22.703  1.00 20.38           C
ATOM   1174  CG1 VAL A 157       8.062  -6.494  21.892  1.00 20.44           C
ATOM   1175  CG2 VAL A 157       9.050  -6.686  24.201  1.00 20.11           C
ATOM   1176  N   LYS A 158      12.488  -6.706  22.361  1.00 20.85           N
ATOM   1177  CA  LYS A 158      13.846  -6.545  22.872  1.00 20.92           C
ATOM   1178  C   LYS A 158      14.212  -5.077  23.021  1.00 20.94           C
ATOM   1179  O   LYS A 158      13.925  -4.268  22.140  1.00 21.23           O
ATOM   1180  CB  LYS A 158      14.852  -7.217  21.935  1.00 21.03           C
ATOM   1181  CG  LYS A 158      14.901  -8.735  22.032  1.00 21.12           C
ATOM   1182  CD  LYS A 158      15.345  -9.358  20.717  1.00 21.17           C
ATOM   1183  CE  LYS A 158      16.860  -9.469  20.639  1.00 21.47           C
ATOM   1184  NZ  LYS A 158      17.364 -10.713  21.279  1.00 21.60           N
ATOM   1185  N   ILE A 159      14.854  -4.747  24.137  1.00 20.82           N
ATOM   1186  CA  ILE A 159      15.380  -3.406  24.373  1.00 20.62           C
ATOM   1187  C   ILE A 159      16.663  -3.190  23.565  1.00 20.60           C
ATOM   1188  O   ILE A 159      17.511  -4.083  23.477  1.00 20.36           O
ATOM   1189  CB  ILE A 159      15.651  -3.196  25.883  1.00 20.67           C
ATOM   1190  CG1 ILE A 159      14.357  -3.319  26.690  1.00 20.75           C
ATOM   1191  CD1 ILE A 159      14.558  -3.910  28.064  1.00 20.51           C
ATOM   1192  CG2 ILE A 159      16.291  -1.846  26.142  1.00 20.48           C
ATOM   1193  N   THR A 160      16.792  -2.001  22.980  1.00 20.67           N
ATOM   1194  CA  THR A 160      17.994  -1.618  22.237  1.00 20.69           C
ATOM   1195  C   THR A 160      18.545  -0.252  22.681  1.00 20.96           C
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FIG. 4T

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ATOM   1196  O   THR A 160      17.920   0.442  23.487  1.00 20.89           O
ATOM   1197  CB  THR A 160      17.726  -1.674  20.704  1.00 20.50           C
ATOM   1198  OG1 THR A 160      18.952  -1.493  19.988  1.00 20.44           O
ATOM   1199  CG2 THR A 160      16.859  -0.510  20.237  1.00 20.18           C
ATOM   1200  N   ASP A 161      19.723   0.103  22.164  1.00 21.46           N
ATOM   1201  CA  ASP A 161      20.374   1.404  22.395  1.00 22.05           C
ATOM   1202  C   ASP A 161      20.705   1.735  23.855  1.00 22.41           C
ATOM   1203  O   ASP A 161      20.660   2.899  24.266  1.00 22.54           O
ATOM   1204  CB  ASP A 161      19.568   2.554  21.769  1.00 22.09           C
ATOM   1205  CG  ASP A 161      19.421   2.427  20.265  1.00 22.27           C
ATOM   1206  OD1 ASP A 161      20.299   1.828  19.601  1.00 22.13           O
ATOM   1207  OD2 ASP A 161      18.448   2.917  19.659  1.00 22.54           O
ATOM   1208  N   PHE A 162      21.048   0.715  24.633  1.00 22.90           N
ATOM   1209  CA  PHE A 162      21.460   0.926  26.018  1.00 23.38           C
ATOM   1210  C   PHE A 162      22.930   1.343  26.094  1.00 23.35           C
ATOM   1211  O   PHE A 162      23.759   0.877  25.308  1.00 23.15           O
ATOM   1212  CB  PHE A 162      21.210  -0.333  26.857  1.00 23.55           C
ATOM   1213  CG  PHE A 162      22.102  -1.486  26.502  1.00 24.06           C
ATOM   1214  CD1 PHE A 162      23.276  -1.717  27.214  1.00 24.57           C
ATOM   1215  CE1 PHE A 162      24.108  -2.784  26.888  1.00 25.22           C
ATOM   1216  CZ  PHE A 162      23.766  -3.634  25.835  1.00 25.31           C
ATOM   1217  CE2 PHE A 162      22.596  -3.412  25.121  1.00 25.47           C
ATOM   1218  CD2 PHE A 162      21.771  -2.341  25.457  1.00 24.79           C
ATOM   1219  N   GLY A 163      23.234   2.228  27.041  1.00 23.34           N
ATOM   1220  CA  GLY A 163      24.598   2.643  27.317  1.00 23.63           C
ATOM   1221  C   GLY A 163      25.268   3.467  26.233  1.00 23.74           C
ATOM   1222  O   GLY A 163      26.395   3.171  25.832  1.00 23.81           O
ATOM   1223  N   LEU A 164      24.573   4.497  25.758  1.00 23.77           N
ATOM   1224  CA  LEU A 164      25.152   5.456  24.824  1.00 23.85           C
ATOM   1225  C   LEU A 164      25.226   6.833  25.485  1.00 24.12           C
ATOM   1226  O   LEU A 164      24.213   7.532  25.628  1.00 24.22           O
ATOM   1227  CB  LEU A 164      24.363   5.506  23.509  1.00 23.82           C
ATOM   1228  CG  LEU A 164      23.879   4.195  22.869  1.00 23.87           C
ATOM   1229  CD1 LEU A 164      22.887   4.480  21.757  1.00 24.37           C
ATOM   1230  CD2 LEU A 164      25.022   3.341  22.340  1.00 24.15           C
ATOM   1231  N   ALA A 165      26.435   7.193  25.913  1.00 24.18           N
ATOM   1232  CA  ALA A 165      26.705   8.449  26.610  1.00 24.07           C
ATOM   1233  C   ALA A 165      28.210   8.711  26.643  1.00 24.11           C
ATOM   1234  O   ALA A 165      29.013   7.774  26.693  1.00 23.96           O
ATOM   1235  CB  ALA A 165      26.147   8.406  28.027  1.00 24.03           C
ATOM   1236  N   VAL A 182      18.270  15.907  25.552  1.00 25.02           N
ATOM   1237  CA  VAL A 182      17.370  15.974  24.400  1.00 24.71           C
ATOM   1238  C   VAL A 182      15.981  15.360  24.686  1.00 24.32           C
ATOM   1239  O   VAL A 182      14.980  16.075  24.583  1.00 24.64           O
ATOM   1240  CB  VAL A 182      18.017  15.386  23.101  1.00 24.93           C
ATOM   1241  CG1 VAL A 182      17.059  15.479  21.911  1.00 25.38           C
ATOM   1242  CG2 VAL A 182      19.324  16.100  22.776  1.00 25.20           C
ATOM   1243  N   PRO A 183      15.905  14.072  25.056  1.00 23.64           N
ATOM   1244  CA  PRO A 183      14.607  13.407  25.248  1.00 23.03           C
ATOM   1245  C   PRO A 183      13.988  13.682  26.623  1.00 22.51           C
ATOM   1246  O   PRO A 183      13.675  12.744  27.364  1.00 22.55           O
ATOM   1247  CB  PRO A 183      14.957  11.923  25.098  1.00 23.21           C
ATOM   1248  CG  PRO A 183      16.372  11.814  25.589  1.00 23.32           C
ATOM   1249  CD  PRO A 183      17.025  13.147  25.324  1.00 23.47           C
ATOM   1250  N   ILE A 184      13.801  14.964  26.933  1.00 21.88           N
ATOM   1251  CA  ILE A 184      13.321  15.430  28.241  1.00 21.08           C
ATOM   1252  C   ILE A 184      12.059  14.714  28.729  1.00 20.43           C
ATOM   1253  O   ILE A 184      11.942  14.395  29.913  1.00 20.47           O
ATOM   1254  CB  ILE A 184      13.095  16.979  28.209  1.00 21.15           C
ATOM   1255  CG1 ILE A 184      14.378  17.717  27.798  1.00 21.07           C
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FIG. 4U

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ATOM   1256  CD1 ILE A 184      15.546  17.598  28.783  1.00 21.24           C
ATOM   1257  CG2 ILE A 184      12.542  17.506  29.547  1.00 21.12           C
ATOM   1258  N   LYS A 185      11.136  14.448  27.808  1.00 19.70           N
ATOM   1259  CA  LYS A 185       9.806  13.925  28.141  1.00 18.98           C
ATOM   1260  C   LYS A 185       9.784  12.468  28.609  1.00 18.35           C
ATOM   1261  O   LYS A 185       8.745  11.964  29.043  1.00 18.25           O
ATOM   1262  CB  LYS A 185       8.858  14.117  26.955  1.00 19.09           C
ATOM   1263  CG  LYS A 185       8.452  15.565  26.742  1.00 19.08           C
ATOM   1264  CD  LYS A 185       7.699  15.744  25.449  1.00 19.02           C
ATOM   1265  CE  LYS A 185       7.606  17.206  25.089  1.00 19.14           C
ATOM   1266  NZ  LYS A 185       6.468  17.462  24.170  1.00 19.61           N
ATOM   1267  N   TRP A 186      10.929  11.799  28.515  1.00 17.68           N
ATOM   1268  CA  TRP A 186      11.071  10.424  28.975  1.00 17.10           C
ATOM   1269  C   TRP A 186      11.950  10.373  30.220  1.00 17.01           C
ATOM   1270  O   TRP A 186      11.997   9.358  30.911  1.00 17.17           O
ATOM   1271  CB  TRP A 186      11.681   9.551  27.874  1.00 16.98           C
ATOM   1272  CG  TRP A 186      10.709   9.126  26.815  1.00 16.64           C
ATOM   1273  CD1 TRP A 186      10.019   7.945  26.759  1.00 16.55           C
ATOM   1274  NE1 TRP A 186       9.222   7.913  25.639  1.00 16.12           N
ATOM   1275  CE2 TRP A 186       9.386   9.080  24.941  1.00 16.13           C
ATOM   1276  CD2 TRP A 186      10.321   9.869  25.652  1.00 16.26           C
ATOM   1277  CE3 TRP A 186      10.664  11.129  25.137  1.00 16.01           C
ATOM   1278  CZ3 TRP A 186      10.074  11.552  23.945  1.00 15.63           C
ATOM   1279  CH2 TRP A 186       9.150  10.743  23.267  1.00 15.58           C
ATOM   1280  CZ2 TRP A 186       8.794   9.507  23.746  1.00 15.70           C
ATOM   1281  N   MET A 187      12.641  11.475  30.498  1.00 16.65           N
ATOM   1282  CA  MET A 187      13.620  11.537  31.580  1.00 16.45           C
ATOM   1283  C   MET A 187      13.000  11.794  32.951  1.00 16.40           C
ATOM   1284  O   MET A 187      11.997  12.504  33.072  1.00 16.38           O
ATOM   1285  CB  MET A 187      14.660  12.618  31.290  1.00 16.42           C
ATOM   1286  CG  MET A 187      15.631  12.269  30.181  1.00 16.96           C
ATOM   1287  SD  MET A 187      16.550  13.704  29.610  1.00 18.00           S
ATOM   1288  CE  MET A 187      17.971  12.896  28.891  1.00 18.94           C
ATOM   1289  N   ALA A 188      13.620  11.212  33.977  1.00 16.07           N
ATOM   1290  CA  ALA A 188      13.285  11.500  35.366  1.00 15.66           C
ATOM   1291  C   ALA A 188      13.661  12.942  35.702  1.00 15.57           C
ATOM   1292  O   ALA A 188      14.498  13.541  35.024  1.00 15.35           O
ATOM   1293  CB  ALA A 188      13.999  10.530  36.291  1.00 15.72           C
ATOM   1294  N   LEU A 189      13.043  13.492  36.746  1.00 15.47           N
ATOM   1295  CA  LEU A 189      13.245  14.892  37.113  1.00 15.43           C
ATOM   1296  C   LEU A 189      14.690  15.206  37.509  1.00 15.41           C
ATOM   1297  O   LEU A 189      15.222  16.261  37.154  1.00 15.47           O
ATOM   1298  CB  LEU A 189      12.274  15.313  38.222  1.00 15.48           C
ATOM   1299  CG  LEU A 189      12.259  16.799  38.600  1.00 15.39           C
ATOM   1300  CD1 LEU A 189      11.780  17.679  37.450  1.00 15.25           C
ATOM   1301  CD2 LEU A 189      11.414  17.018  39.833  1.00 15.13           C
ATOM   1302  N   GLU A 190      15.320  14.282  38.227  1.00 15.32           N
ATOM   1303  CA  GLU A 190      16.716  14.434  38.628  1.00 15.39           C
ATOM   1304  C   GLU A 190      17.683  14.332  37.438  1.00 15.34           C
ATOM   1305  O   GLU A 190      18.820  14.784  37.524  1.00 15.47           O
ATOM   1306  CB  GLU A 190      17.076  13.434  39.738  1.00 15.32           C
ATOM   1307  CG  GLU A 190      17.325  12.007  39.264  1.00 15.72           C
ATOM   1308  CD  GLU A 190      16.093  11.123  39.314  1.00 15.81           C
ATOM   1309  OE1 GLU A 190      16.259   9.883  39.274  1.00 16.54           O
ATOM   1310  OE2 GLU A 190      14.963  11.651  39.390  1.00 15.33           O
ATOM   1311  N   SER A 191      17.221  13.743  36.336  1.00 15.30           N
ATOM   1312  CA  SER A 191      18.011  13.653  35.111  1.00 15.37           C
ATOM   1313  C   SER A 191      17.987  14.961  34.328  1.00 15.40           C
ATOM   1314  O   SER A 191      18.936  15.278  33.613  1.00 15.60           O
ATOM   1315  CB  SER A 191      17.508  12.512  34.223  1.00 15.43           C
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FIG. 4V

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ATOM   1316  OG  SER A 191      17.990  11.258  34.673  1.00 15.35           O
ATOM   1317  N   ILE A 192      16.897  15.712  34.465  1.00 15.50           N
ATOM   1318  CA  ILE A 192      16.714  16.974  33.745  1.00 15.42           C
ATOM   1319  C   ILE A 192      17.385  18.142  34.469  1.00 15.48           C
ATOM   1320  O   ILE A 192      17.906  19.058  33.830  1.00 15.40           O
ATOM   1321  CB  ILE A 192      15.205  17.269  33.531  1.00 15.35           C
ATOM   1322  CG1 ILE A 192      14.527  16.114  32.790  1.00 14.87           C
ATOM   1323  CD1 ILE A 192      13.058  15.962  33.108  1.00 15.07           C
ATOM   1324  CG2 ILE A 192      15.003  18.584  32.773  1.00 15.22           C
ATOM   1325  N   LEU A 193      17.368  18.100  35.799  1.00 15.57           N
ATOM   1326  CA  LEU A 193      17.897  19.194  36.611  1.00 15.62           C
ATOM   1327  C   LEU A 193      19.318  18.948  37.117  1.00 15.80           C
ATOM   1328  O   LEU A 193      20.109  19.883  37.237  1.00 15.79           O
ATOM   1329  CB  LEU A 193      16.964  19.494  37.789  1.00 15.41           C
ATOM   1330  CG  LEU A 193      15.460  19.644  37.532  1.00 15.29           C
ATOM   1331  CD1 LEU A 193      14.715  19.684  38.856  1.00 14.80           C
ATOM   1332  CD2 LEU A 193      15.127  20.876  36.684  1.00 14.79           C
ATOM   1333  N   HIS A 194      19.637  17.692  37.415  1.00 16.06           N
ATOM   1334  CA  HIS A 194      20.931  17.359  38.007  1.00 16.44           C
ATOM   1335  C   HIS A 194      21.814  16.561  37.057  1.00 16.42           C
ATOM   1336  O   HIS A 194      23.015  16.423  37.290  1.00 16.51           O
ATOM   1337  CB  HIS A 194      20.753  16.589  39.325  1.00 16.44           C
ATOM   1338  CG  HIS A 194      19.846  17.259  40.313  1.00 16.71           C
ATOM   1339  ND1 HIS A 194      19.198  16.565  41.312  1.00 16.78           N
ATOM   1340  CE1 HIS A 194      18.471  17.404  42.028  1.00 16.92           C
ATOM   1341  NE2 HIS A 194      18.627  18.618  41.534  1.00 17.02           N
ATOM   1342  CD2 HIS A 194      19.485  18.557  40.463  1.00 16.68           C
ATOM   1343  N   ARG A 195      21.209  16.047  35.987  1.00 16.63           N
ATOM   1344  CA  ARG A 195      21.875  15.142  35.048  1.00 16.70           C
ATOM   1345  C   ARG A 195      22.338  13.858  35.745  1.00 16.67           C
ATOM   1346  O   ARG A 195      23.431  13.349  35.479  1.00 16.82           O
ATOM   1347  CB  ARG A 195      23.040  15.841  34.331  1.00 17.00           C
ATOM   1348  CG  ARG A 195      22.645  17.073  33.533  1.00 17.15           C
ATOM   1349  CD  ARG A 195      23.749  17.597  32.635  1.00 18.04           C
ATOM   1350  NE  ARG A 195      23.459  18.939  32.135  1.00 18.55           N
ATOM   1351  CZ  ARG A 195      24.374  19.790  31.682  1.00 18.89           C
ATOM   1352  NH1 ARG A 195      24.002  20.990  31.253  1.00 19.08           N
ATOM   1353  NH2 ARG A 195      25.659  19.451  31.655  1.00 18.55           N
ATOM   1354  N   ILE A 196      21.494  13.350  36.642  1.00 16.52           N
ATOM   1355  CA  ILE A 196      21.760  12.109  37.365  1.00 16.40           C
ATOM   1356  C   ILE A 196      21.037  10.941  36.688  1.00 16.40           C
ATOM   1357  O   ILE A 196      19.845  11.036  36.374  1.00 16.50           O
ATOM   1358  CB  ILE A 196      21.337  12.250  38.850  1.00 16.44           C
ATOM   1359  CG1 ILE A 196      22.331  13.144  39.602  1.00 16.56           C
ATOM   1360  CD1 ILE A 196      21.887  13.546  41.005  1.00 17.00           C
ATOM   1361  CG2 ILE A 196      21.213  10.877  39.525  1.00 16.41           C
ATOM   1362  N   TYR A 197      21.764   9.847  36.463  1.00 16.06           N
ATOM   1363  CA  TYR A 197      21.202   8.665  35.818  1.00 15.94           C
ATOM   1364  C   TYR A 197      21.468   7.388  36.609  1.00 15.95           C
ATOM   1365  O   TYR A 197      22.607   6.919  36.691  1.00 16.09           O
ATOM   1366  CB  TYR A 197      21.737   8.524  34.393  1.00 15.99           C
ATOM   1367  CG  TYR A 197      21.366   9.667  33.478  1.00 16.10           C
ATOM   1368  CD1 TYR A 197      20.149   9.671  32.795  1.00 16.35           C
ATOM   1369  CE1 TYR A 197      19.806  10.720  31.944  1.00 16.43           C
ATOM   1370  CZ  TYR A 197      20.687  11.776  31.777  1.00 16.45           C
ATOM   1371  OH  TYR A 197      20.354  12.814  30.947  1.00 17.09           O
ATOM   1372  CE2 TYR A 197      21.899  11.796  32.446  1.00 16.39           C
ATOM   1373  CD2 TYR A 197      22.232  10.744  33.292  1.00 16.30           C
ATOM   1374  N   THR A 198      20.407   6.836  37.194  1.00 15.84           N
ATOM   1375  CA  THR A 198      20.496   5.592  37.956  1.00 15.92           C
```

FIG. 4W

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ATOM   1376  C   THR A 198      19.527   4.554  37.388  1.00 16.16           C
ATOM   1377  O   THR A 198      18.961   4.750  36.310  1.00 16.34           O
ATOM   1378  CB  THR A 198      20.221   5.833  39.467  1.00 15.89           C
ATOM   1379  OG1 THR A 198      18.904   6.370  39.643  1.00 16.16           O
ATOM   1380  CG2 THR A 198      21.138   6.919  40.036  1.00 15.36           C
ATOM   1381  N   HIS A 199      19.344   3.448  38.105  1.00 16.11           N
ATOM   1382  CA  HIS A 199      18.382   2.430  37.694  1.00 16.10           C
ATOM   1383  C   HIS A 199      16.950   2.884  37.976  1.00 15.96           C
ATOM   1384  O   HIS A 199      16.007   2.427  37.328  1.00 16.01           O
ATOM   1385  CB  HIS A 199      18.685   1.089  38.368  1.00 16.16           C
ATOM   1386  CG  HIS A 199      20.016   0.514  37.995  1.00 16.30           C
ATOM   1387  ND1 HIS A 199      21.010   0.274  38.919  1.00 16.50           N
ATOM   1388  CE1 HIS A 199      22.068  -0.229  38.307  1.00 16.31           C
ATOM   1389  NE2 HIS A 199      21.797  -0.321  37.017  1.00 16.44           N
ATOM   1390  CD2 HIS A 199      20.522   0.140  36.796  1.00 16.43           C
ATOM   1391  N   GLN A 200      16.803   3.794  38.940  1.00 15.71           N
ATOM   1392  CA  GLN A 200      15.511   4.398  39.266  1.00 15.24           C
ATOM   1393  C   GLN A 200      15.136   5.503  38.277  1.00 14.88           C
ATOM   1394  O   GLN A 200      13.955   5.817  38.101  1.00 14.65           O
ATOM   1395  CB  GLN A 200      15.508   4.931  40.701  1.00 15.07           C
ATOM   1396  CG  GLN A 200      15.663   3.852  41.776  1.00 15.30           C
ATOM   1397  CD  GLN A 200      14.678   2.704  41.621  1.00 15.16           C
ATOM   1398  OE1 GLN A 200      15.028   1.652  41.091  1.00 15.03           O
ATOM   1399  NE2 GLN A 200      13.447   2.904  42.082  1.00 15.34           N
ATOM   1400  N   SER A 201      16.147   6.087  37.640  1.00 14.65           N
ATOM   1401  CA  SER A 201      15.943   7.005  36.520  1.00 14.61           C
ATOM   1402  C   SER A 201      15.288   6.270  35.351  1.00 14.26           C
ATOM   1403  O   SER A 201      14.387   6.805  34.704  1.00 14.07           O
ATOM   1404  CB  SER A 201      17.278   7.598  36.063  1.00 14.61           C
ATOM   1405  OG  SER A 201      17.368   8.967  36.397  1.00 15.71           O
ATOM   1406  N   ASP A 202      15.756   5.045  35.096  1.00 13.85           N
ATOM   1407  CA  ASP A 202      15.247   4.200  34.018  1.00 13.46           C
ATOM   1408  C   ASP A 202      13.810   3.751  34.273  1.00 13.21           C
ATOM   1409  O   ASP A 202      13.037   3.587  33.328  1.00 13.50           O
ATOM   1410  CB  ASP A 202      16.142   2.968  33.826  1.00 13.60           C
ATOM   1411  CG  ASP A 202      17.440   3.281  33.091  1.00 13.51           C
ATOM   1412  OD1 ASP A 202      18.416   2.520  33.276  1.00 13.11           O
ATOM   1413  OD2 ASP A 202      17.584   4.249  32.311  1.00 13.33           O
ATOM   1414  N   VAL A 203      13.461   3.546  35.544  1.00 12.65           N
ATOM   1415  CA  VAL A 203      12.096   3.173  35.928  1.00 12.05           C
ATOM   1416  C   VAL A 203      11.087   4.230  35.460  1.00 11.80           C
ATOM   1417  O   VAL A 203      10.033   3.887  34.918  1.00 11.87           O
ATOM   1418  CB  VAL A 203      11.967   2.907  37.460  1.00 11.93           C
ATOM   1419  CG1 VAL A 203      10.507   2.757  37.875  1.00 11.84           C
ATOM   1420  CG2 VAL A 203      12.738   1.656  37.857  1.00 11.42           C
ATOM   1421  N   TRP A 204      11.427   5.504  35.658  1.00 11.36           N
ATOM   1422  CA  TRP A 204      10.624   6.625  35.165  1.00 11.08           C
ATOM   1423  C   TRP A 204      10.350   6.487  33.668  1.00 10.86           C
ATOM   1424  O   TRP A 204       9.193   6.504  33.246  1.00 10.60           O
ATOM   1425  CB  TRP A 204      11.321   7.959  35.461  1.00 11.08           C
ATOM   1426  CG  TRP A 204      10.499   9.187  35.142  1.00 11.50           C
ATOM   1427  CD1 TRP A 204      10.020   9.567  33.918  1.00 11.52           C
ATOM   1428  NE1 TRP A 204       9.323  10.746  34.025  1.00 11.48           N
ATOM   1429  CE2 TRP A 204       9.346  11.162  35.329  1.00 11.15           C
ATOM   1430  CD2 TRP A 204      10.079  10.204  36.063  1.00 11.66           C
ATOM   1431  CE3 TRP A 204      10.248  10.405  37.442  1.00 11.70           C
ATOM   1432  CZ3 TRP A 204       9.692  11.529  38.028  1.00 11.60           C
ATOM   1433  CH2 TRP A 204       8.967  12.459  37.268  1.00 11.90           C
ATOM   1434  CZ2 TRP A 204       8.785  12.293  35.920  1.00 11.61           C
ATOM   1435  N   SER A 205      11.417   6.339  32.883  1.00 10.60           N
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FIG. 4X

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ATOM   1436  CA  SER A 205      11.319   6.168  31.432  1.00 10.78           C
ATOM   1437  C   SER A 205      10.478   4.958  31.037  1.00 10.87           C
ATOM   1438  O   SER A 205       9.708   5.024  30.076  1.00 10.84           O
ATOM   1439  CB  SER A 205      12.709   6.074  30.807  1.00 10.83           C
ATOM   1440  OG  SER A 205      13.424   7.284  30.992  1.00 10.86           O
ATOM   1441  N   TYR A 206      10.631   3.866  31.787  1.00 11.00           N
ATOM   1442  CA  TYR A 206       9.801   2.674  31.637  1.00 11.09           C
ATOM   1443  C   TYR A 206       8.319   3.019  31.810  1.00 11.36           C
ATOM   1444  O   TYR A 206       7.483   2.582  31.020  1.00 11.57           O
ATOM   1445  CB  TYR A 206      10.245   1.594  32.633  1.00 11.20           C
ATOM   1446  CG  TYR A 206       9.383   0.347  32.673  1.00 10.90           C
ATOM   1447  CD1 TYR A 206       8.330   0.236  33.579  1.00 11.02           C
ATOM   1448  CE1 TYR A 206       7.535  -0.910  33.627  1.00 11.16           C
ATOM   1449  CZ  TYR A 206       7.802  -1.964  32.772  1.00 10.74           C
ATOM   1450  OH  TYR A 206       7.016  -3.086  32.830  1.00 10.40           O
ATOM   1451  CE2 TYR A 206       8.849  -1.886  31.863  1.00 10.78           C
ATOM   1452  CD2 TYR A 206       9.635  -0.731  31.821  1.00 11.05           C
ATOM   1453  N   GLY A 207       8.003   3.811  32.834  1.00 11.29           N
ATOM   1454  CA  GLY A 207       6.649   4.296  33.047  1.00 11.28           C
ATOM   1455  C   GLY A 207       6.083   5.045  31.851  1.00 11.14           C
ATOM   1456  O   GLY A 207       4.928   4.847  31.476  1.00 11.25           O
ATOM   1457  N   VAL A 208       6.904   5.904  31.253  1.00 11.19           N
ATOM   1458  CA  VAL A 208       6.533   6.653  30.050  1.00 11.14           C
ATOM   1459  C   VAL A 208       6.389   5.721  28.839  1.00 11.08           C
ATOM   1460  O   VAL A 208       5.473   5.884  28.030  1.00 11.10           O
ATOM   1461  CB  VAL A 208       7.555   7.782  29.747  1.00 11.13           C
ATOM   1462  CG1 VAL A 208       7.124   8.606  28.544  1.00 11.24           C
ATOM   1463  CG2 VAL A 208       7.737   8.685  30.966  1.00 10.97           C
ATOM   1464  N   THR A 209       7.294   4.746  28.736  1.00 10.89           N
ATOM   1465  CA  THR A 209       7.265   3.735  27.679  1.00 10.48           C
ATOM   1466  C   THR A 209       5.965   2.929  27.707  1.00 10.72           C
ATOM   1467  O   THR A 209       5.346   2.711  26.664  1.00 10.81           O
ATOM   1468  CB  THR A 209       8.490   2.801  27.804  1.00 10.40           C
ATOM   1469  OG1 THR A 209       9.691   3.570  27.675  1.00  9.30           O
ATOM   1470  CG2 THR A 209       8.560   1.821  26.636  1.00  9.93           C
ATOM   1471  N   VAL A 210       5.560   2.497  28.902  1.00 10.80           N
ATOM   1472  CA  VAL A 210       4.296   1.788  29.099  1.00 10.97           C
ATOM   1473  C   VAL A 210       3.113   2.674  28.683  1.00 11.27           C
ATOM   1474  O   VAL A 210       2.181   2.207  28.023  1.00 11.29           O
ATOM   1475  CB  VAL A 210       4.137   1.284  30.568  1.00 10.87           C
ATOM   1476  CG1 VAL A 210       2.769   0.644  30.794  1.00 10.41           C
ATOM   1477  CG2 VAL A 210       5.237   0.286  30.920  1.00 11.02           C
ATOM   1478  N   TRP A 211       3.168   3.952  29.052  1.00 11.64           N
ATOM   1479  CA  TRP A 211       2.135   4.911  28.667  1.00 12.07           C
ATOM   1480  C   TRP A 211       1.984   4.992  27.149  1.00 12.36           C
ATOM   1481  O   TRP A 211       0.867   5.090  26.644  1.00 12.54           O
ATOM   1482  CB  TRP A 211       2.429   6.297  29.246  1.00 12.10           C
ATOM   1483  CG  TRP A 211       1.333   7.295  29.002  1.00 12.17           C
ATOM   1484  CD1 TRP A 211       0.244   7.529  29.795  1.00 12.20           C
ATOM   1485  NE1 TRP A 211      -0.540   8.516  29.245  1.00 12.12           N
ATOM   1486  CE2 TRP A 211       0.032   8.942  28.076  1.00 11.77           C
ATOM   1487  CD2 TRP A 211       1.215   8.193  27.889  1.00 12.01           C
ATOM   1488  CE3 TRP A 211       1.992   8.442  26.746  1.00 11.94           C
ATOM   1489  CZ3 TRP A 211       1.568   9.416  25.844  1.00 11.61           C
ATOM   1490  CH2 TRP A 211       0.386  10.139  26.063  1.00 11.19           C
ATOM   1491  CZ2 TRP A 211      -0.392   9.919  27.169  1.00 11.54           C
ATOM   1492  N   GLU A 212       3.108   4.948  26.434  1.00 12.58           N
ATOM   1493  CA  GLU A 212       3.110   4.967  24.972  1.00 12.64           C
ATOM   1494  C   GLU A 212       2.363   3.768  24.399  1.00 12.97           C
ATOM   1495  O   GLU A 212       1.582   3.912  23.462  1.00 13.32           O
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FIG. 4Y

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ATOM   1496  CB  GLU A 212       4.538   4.967  24.430  1.00 12.50           C
ATOM   1497  CG  GLU A 212       5.332   6.233  24.688  1.00 11.97           C
ATOM   1498  CD  GLU A 212       6.702   6.167  24.055  1.00 11.43           C
ATOM   1499  OE1 GLU A 212       6.835   6.581  22.883  1.00 11.08           O
ATOM   1500  OE2 GLU A 212       7.641   5.680  24.722  1.00 11.03           O
ATOM   1501  N   LEU A 213       2.609   2.590  24.967  1.00 13.28           N
ATOM   1502  CA  LEU A 213       1.984   1.354  24.499  1.00 13.71           C
ATOM   1503  C   LEU A 213       0.473   1.340  24.751  1.00 14.03           C
ATOM   1504  O   LEU A 213      -0.310   1.016  23.852  1.00 14.12           O
ATOM   1505  CB  LEU A 213       2.652   0.129  25.140  1.00 13.65           C
ATOM   1506  CG  LEU A 213       4.172  -0.042  24.981  1.00 13.61           C
ATOM   1507  CD1 LEU A 213       4.650  -1.317  25.663  1.00 13.24           C
ATOM   1508  CD2 LEU A 213       4.599  -0.024  23.514  1.00 13.51           C
ATOM   1509  N   MET A 214       0.078   1.710  25.968  1.00 14.19           N
ATOM   1510  CA  MET A 214      -1.322   1.705  26.382  1.00 14.41           C
ATOM   1511  C   MET A 214      -2.155   2.757  25.651  1.00 14.65           C
ATOM   1512  O   MET A 214      -3.373   2.606  25.526  1.00 14.87           O
ATOM   1513  CB  MET A 214      -1.441   1.901  27.899  1.00 14.50           C
ATOM   1514  CG  MET A 214      -0.707   0.864  28.744  1.00 14.52           C
ATOM   1515  SD  MET A 214      -1.317  -0.822  28.524  1.00 14.52           S
ATOM   1516  CE  MET A 214      -0.293  -1.699  29.695  1.00 14.80           C
ATOM   1517  N   THR A 215      -1.503   3.817  25.178  1.00 14.76           N
ATOM   1518  CA  THR A 215      -2.176   4.841  24.375  1.00 15.24           C
ATOM   1519  C   THR A 215      -2.098   4.542  22.878  1.00 15.36           C
ATOM   1520  O   THR A 215      -2.676   5.266  22.069  1.00 15.43           O
ATOM   1521  CB  THR A 215      -1.605   6.252  24.654  1.00 15.24           C
ATOM   1522  OG1 THR A 215      -0.171   6.215  24.620  1.00 15.77           O
ATOM   1523  CG2 THR A 215      -1.931   6.709  26.067  1.00 15.02           C
ATOM   1524  N   PHE A 216      -1.386   3.471  22.528  1.00 15.82           N
ATOM   1525  CA  PHE A 216      -1.163   3.047  21.138  1.00 16.27           C
ATOM   1526  C   PHE A 216      -0.301   4.028  20.340  1.00 16.46           C
ATOM   1527  O   PHE A 216      -0.621   4.372  19.197  1.00 16.56           O
ATOM   1528  CB  PHE A 216      -2.483   2.736  20.409  1.00 16.29           C
ATOM   1529  CG  PHE A 216      -3.254   1.588  21.004  1.00 16.75           C
ATOM   1530  CD1 PHE A 216      -2.795   0.279  20.876  1.00 16.68           C
ATOM   1531  CE1 PHE A 216      -3.508  -0.786  21.429  1.00 16.75           C
ATOM   1532  CZ  PHE A 216      -4.692  -0.546  22.117  1.00 16.83           C
ATOM   1533  CE2 PHE A 216      -5.162   0.758  22.252  1.00 16.98           C
ATOM   1534  CD2 PHE A 216      -4.441   1.818  21.696  1.00 16.92           C
ATOM   1535  N   GLY A 217       0.788   4.474  20.961  1.00 16.52           N
ATOM   1536  CA  GLY A 217       1.786   5.292  20.297  1.00 16.86           C
ATOM   1537  C   GLY A 217       1.638   6.794  20.443  1.00 17.27           C
ATOM   1538  O   GLY A 217       2.250   7.548  19.682  1.00 17.35           O
ATOM   1539  N   SER A 218       0.840   7.234  21.412  1.00 17.71           N
ATOM   1540  CA  SER A 218       0.640   8.664  21.644  1.00 18.33           C
ATOM   1541  C   SER A 218       1.924   9.346  22.106  1.00 18.70           C
ATOM   1542  O   SER A 218       2.709   8.775  22.868  1.00 18.74           O
ATOM   1543  CB  SER A 218      -0.480   8.913  22.656  1.00 18.30           C
ATOM   1544  OG  SER A 218      -1.756   8.825  22.041  1.00 18.54           O
ATOM   1545  N   LYS A 219       2.131  10.566  21.622  1.00 19.16           N
ATOM   1546  CA  LYS A 219       3.287  11.363  21.999  1.00 19.67           C
ATOM   1547  C   LYS A 219       3.065  11.969  23.385  1.00 19.95           C
ATOM   1548  O   LYS A 219       2.010  12.557  23.643  1.00 19.87           O
ATOM   1549  CB  LYS A 219       3.540  12.455  20.959  1.00 19.75           C
ATOM   1550  CG  LYS A 219       4.225  11.950  19.704  1.00 20.07           C
ATOM   1551  CD  LYS A 219       4.205  12.991  18.598  1.00 21.12           C
ATOM   1552  CE  LYS A 219       4.475  12.355  17.239  1.00 21.85           C
ATOM   1553  NZ  LYS A 219       5.854  11.786  17.141  1.00 22.77           N
ATOM   1554  N   PRO A 220       4.048  11.821  24.276  1.00 20.25           N
ATOM   1555  CA  PRO A 220       3.914  12.303  25.659  1.00 20.59           C
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FIG. 4Z

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ATOM   1556  C   PRO A 220       3.969  13.826  25.743  1.00 20.84           C
ATOM   1557  O   PRO A 220       4.730  14.445  24.992  1.00 20.97           O
ATOM   1558  CB  PRO A 220       5.115  11.671  26.373  1.00 20.53           C
ATOM   1559  CG  PRO A 220       6.122  11.431  25.294  1.00 20.45           C
ATOM   1560  CD  PRO A 220       5.358  11.190  24.028  1.00 19.99           C
ATOM   1561  N   TYR A 221       3.164  14.401  26.638  1.00 21.13           N
ATOM   1562  CA  TYR A 221       3.043  15.855  26.825  1.00 21.55           C
ATOM   1563  C   TYR A 221       3.050  16.638  25.509  1.00 21.95           C
ATOM   1564  O   TYR A 221       3.931  17.472  25.284  1.00 21.96           O
ATOM   1565  CB  TYR A 221       4.147  16.398  27.740  1.00 21.40           C
ATOM   1566  CG  TYR A 221       4.495  15.553  28.944  1.00 21.04           C
ATOM   1567  CD1 TYR A 221       3.767  15.655  30.128  1.00 20.62           C
ATOM   1568  CE1 TYR A 221       4.097  14.886  31.241  1.00 20.61           C
ATOM   1569  CZ  TYR A 221       5.176  14.018  31.178  1.00 20.46           C
ATOM   1570  OH  TYR A 221       5.512  13.258  32.272  1.00 20.34           O
ATOM   1571  CE2 TYR A 221       5.916  13.905  30.017  1.00 20.67           C
ATOM   1572  CD2 TYR A 221       5.578  14.677  28.909  1.00 20.98           C
ATOM   1573  N   ASP A 222       2.068  16.372  24.652  1.00 22.48           N
ATOM   1574  CA  ASP A 222       2.032  16.957  23.309  1.00 23.20           C
ATOM   1575  C   ASP A 222       2.046  18.493  23.262  1.00 23.22           C
ATOM   1576  O   ASP A 222       2.841  19.085  22.527  1.00 23.57           O
ATOM   1577  CB  ASP A 222       0.847  16.413  22.506  1.00 23.36           C
ATOM   1578  CG  ASP A 222       1.030  16.595  21.016  1.00 23.98           C
ATOM   1579  OD1 ASP A 222       0.866  17.734  20.528  1.00 24.37           O
ATOM   1580  OD2 ASP A 222       1.348  15.659  20.253  1.00 25.14           O
ATOM   1581  N   GLY A 223       1.173  19.130  24.036  1.00 23.04           N
ATOM   1582  CA  GLY A 223       1.078  20.581  24.038  1.00 23.08           C
ATOM   1583  C   GLY A 223       2.113  21.293  24.894  1.00 22.99           C
ATOM   1584  O   GLY A 223       2.182  22.525  24.894  1.00 22.94           O
ATOM   1585  N   ILE A 224       2.915  20.518  25.621  1.00 22.70           N
ATOM   1586  CA  ILE A 224       3.926  21.064  26.519  1.00 22.37           C
ATOM   1587  C   ILE A 224       5.310  20.965  25.879  1.00 22.21           C
ATOM   1588  O   ILE A 224       5.753  19.871  25.528  1.00 22.31           O
ATOM   1589  CB  ILE A 224       3.913  20.328  27.896  1.00 22.38           C
ATOM   1590  CG1 ILE A 224       2.506  19.811  28.262  1.00 22.35           C
ATOM   1591  CD1 ILE A 224       1.467  20.885  28.597  1.00 22.43           C
ATOM   1592  CG2 ILE A 224       4.521  21.206  28.995  1.00 22.12           C
ATOM   1593  N   PRO A 225       5.986  22.101  25.709  1.00 21.92           N
ATOM   1594  CA  PRO A 225       7.373  22.096  25.227  1.00 21.76           C
ATOM   1595  C   PRO A 225       8.339  21.573  26.293  1.00 21.65           C
ATOM   1596  O   PRO A 225       8.026  21.623  27.484  1.00 21.75           O
ATOM   1597  CB  PRO A 225       7.649  23.571  24.906  1.00 21.74           C
ATOM   1598  CG  PRO A 225       6.652  24.350  25.681  1.00 21.88           C
ATOM   1599  CD  PRO A 225       5.475  23.464  25.942  1.00 21.78           C
ATOM   1600  N   ALA A 226       9.493  21.076  25.857  1.00 21.56           N
ATOM   1601  CA  ALA A 226      10.479  20.464  26.750  1.00 21.30           C
ATOM   1602  C   ALA A 226      10.953  21.395  27.867  1.00 21.14           C
ATOM   1603  O   ALA A 226      11.230  20.943  28.983  1.00 21.18           O
ATOM   1604  CB  ALA A 226      11.665  19.943  25.949  1.00 21.35           C
ATOM   1605  N   SER A 227      11.031  22.690  27.564  1.00 20.82           N
ATOM   1606  CA  SER A 227      11.462  23.698  28.532  1.00 20.42           C
ATOM   1607  C   SER A 227      10.447  23.936  29.653  1.00 20.22           C
ATOM   1608  O   SER A 227      10.774  24.552  30.667  1.00 20.39           O
ATOM   1609  CB  SER A 227      11.810  25.017  27.825  1.00 20.47           C
ATOM   1610  OG  SER A 227      10.706  25.543  27.106  1.00 20.20           O
ATOM   1611  N   GLU A 228       9.228  23.432  29.472  1.00 20.06           N
ATOM   1612  CA  GLU A 228       8.161  23.573  30.467  1.00 19.96           C
ATOM   1613  C   GLU A 228       7.863  22.284  31.249  1.00 19.60           C
ATOM   1614  O   GLU A 228       7.043  22.291  32.170  1.00 19.60           O
ATOM   1615  CB  GLU A 228       6.876  24.084  29.803  1.00 20.13           C
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FIG. 4AA

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ATOM   1616  CG  GLU A 228       7.016  25.425  29.098  1.00 20.70           C
ATOM   1617  CD  GLU A 228       7.139  26.594  30.057  1.00 21.48           C
ATOM   1618  OE1 GLU A 228       6.474  26.579  31.114  1.00 21.87           O
ATOM   1619  OE2 GLU A 228       7.903  27.534  29.748  1.00 22.07           O
ATOM   1620  N   ILE A 229       8.536  21.193  30.885  1.00 19.27           N
ATOM   1621  CA  ILE A 229       8.304  19.875  31.486  1.00 19.00           C
ATOM   1622  C   ILE A 229       8.592  19.813  32.997  1.00 18.87           C
ATOM   1623  O   ILE A 229       7.751  19.344  33.767  1.00 18.73           O
ATOM   1624  CB  ILE A 229       9.094  18.772  30.711  1.00 18.98           C
ATOM   1625  CG1 ILE A 229       8.512  18.560  29.303  1.00 18.73           C
ATOM   1626  CD1 ILE A 229       7.059  18.094  29.254  1.00 17.92           C
ATOM   1627  CG2 ILE A 229       9.154  17.462  31.502  1.00 18.78           C
ATOM   1628  N   SER A 230       9.764  20.291  33.414  1.00 18.76           N
ATOM   1629  CA  SER A 230      10.130  20.307  34.836  1.00 18.71           C
ATOM   1630  C   SER A 230       9.120  21.081  35.681  1.00 18.57           C
ATOM   1631  O   SER A 230       8.848  20.706  36.821  1.00 18.28           O
ATOM   1632  CB  SER A 230      11.543  20.862  35.045  1.00 18.69           C
ATOM   1633  OG  SER A 230      11.636  22.209  34.616  1.00 19.01           O
ATOM   1634  N   SER A 231       8.560  22.145  35.106  1.00 18.63           N
ATOM   1635  CA  SER A 231       7.543  22.957  35.774  1.00 18.67           C
ATOM   1636  C   SER A 231       6.243  22.190  36.022  1.00 18.74           C
ATOM   1637  O   SER A 231       5.755  22.151  37.152  1.00 19.01           O
ATOM   1638  CB  SER A 231       7.262  24.241  34.987  1.00 18.56           C
ATOM   1639  OG  SER A 231       6.154  24.935  35.537  1.00 18.36           O
ATOM   1640  N   ILE A 232       5.689  21.577  34.977  1.00 18.72           N
ATOM   1641  CA  ILE A 232       4.453  20.805  35.129  1.00 18.83           C
ATOM   1642  C   ILE A 232       4.616  19.598  36.072  1.00 18.81           C
ATOM   1643  O   ILE A 232       3.690  19.259  36.805  1.00 18.86           O
ATOM   1644  CB  ILE A 232       3.820  20.398  33.747  1.00 18.91           C
ATOM   1645  CG1 ILE A 232       4.626  19.301  33.041  1.00 18.56           C
ATOM   1646  CD1 ILE A 232       3.938  17.960  33.036  1.00 17.74           C
ATOM   1647  CG2 ILE A 232       3.645  21.613  32.835  1.00 18.82           C
ATOM   1648  N   LEU A 233       5.797  18.978  36.067  1.00 18.80           N
ATOM   1649  CA  LEU A 233       6.066  17.816  36.920  1.00 18.77           C
ATOM   1650  C   LEU A 233       6.152  18.182  38.402  1.00 18.86           C
ATOM   1651  O   LEU A 233       5.641  17.452  39.253  1.00 18.77           O
ATOM   1652  CB  LEU A 233       7.342  17.087  36.480  1.00 18.68           C
ATOM   1653  CG  LEU A 233       7.376  16.345  35.140  1.00 18.50           C
ATOM   1654  CD1 LEU A 233       8.783  15.844  34.869  1.00 18.03           C
ATOM   1655  CD2 LEU A 233       6.374  15.193  35.077  1.00 18.39           C
ATOM   1656  N   GLU A 234       6.792  19.314  38.700  1.00 19.10           N
ATOM   1657  CA  GLU A 234       6.897  19.812  40.077  1.00 19.27           C
ATOM   1658  C   GLU A 234       5.551  20.344  40.582  1.00 19.12           C
ATOM   1659  O   GLU A 234       5.321  20.430  41.791  1.00 18.98           O
ATOM   1660  CB  GLU A 234       7.990  20.888  40.207  1.00 19.22           C
ATOM   1661  CG  GLU A 234       9.411  20.394  39.944  1.00 19.78           C
ATOM   1662  CD  GLU A 234      10.129  19.880  41.185  1.00 20.57           C
ATOM   1663  OE1 GLU A 234      11.362  20.076  41.279  1.00 20.95           O
ATOM   1664  OE2 GLU A 234       9.479  19.267  42.060  1.00 20.64           O
ATOM   1665  N   LYS A 235       4.668  20.687  39.646  1.00 19.06           N
ATOM   1666  CA  LYS A 235       3.316  21.136  39.966  1.00 18.94           C
ATOM   1667  C   LYS A 235       2.381  19.963  40.271  1.00 18.93           C
ATOM   1668  O   LYS A 235       1.229  20.164  40.668  1.00 18.95           O
ATOM   1669  CB  LYS A 235       2.755  21.984  38.823  1.00 18.92           C
ATOM   1670  CG  LYS A 235       2.836  23.482  39.069  1.00 18.70           C
ATOM   1671  CD  LYS A 235       3.254  24.227  37.818  1.00 18.66           C
ATOM   1672  CE  LYS A 235       2.903  25.703  37.907  1.00 19.05           C
ATOM   1673  NZ  LYS A 235       1.961  26.119  36.830  1.00 19.31           N
ATOM   1674  N   GLY A 236       2.885  18.744  40.090  1.00 18.81           N
ATOM   1675  CA  GLY A 236       2.120  17.537  40.348  1.00 18.41           C
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FIG. 4BB

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ATOM   1676  C   GLY A 236       1.517  16.921  39.100  1.00 18.28           C
ATOM   1677  O   GLY A 236       0.925  15.846  39.164  1.00 18.52           O
ATOM   1678  N   GLU A 237       1.668  17.599  37.965  1.00 18.11           N
ATOM   1679  CA  GLU A 237       1.069  17.151  36.713  1.00 17.92           C
ATOM   1680  C   GLU A 237       1.799  15.953  36.116  1.00 17.69           C
ATOM   1681  O   GLU A 237       3.032  15.945  36.001  1.00 17.32           O
ATOM   1682  CB  GLU A 237       1.020  18.287  35.698  1.00 18.19           C
ATOM   1683  CG  GLU A 237      -0.243  19.122  35.762  1.00 18.82           C
ATOM   1684  CD  GLU A 237      -0.084  20.450  35.057  1.00 19.23           C
ATOM   1685  OE1 GLU A 237      -0.016  20.455  33.808  1.00 19.67           O
ATOM   1686  OE2 GLU A 237      -0.020  21.483  35.754  1.00 19.42           O
ATOM   1687  N   ARG A 238       1.014  14.947  35.739  1.00 17.15           N
ATOM   1688  CA  ARG A 238       1.535  13.720  35.157  1.00 16.62           C
ATOM   1689  C   ARG A 238       0.815  13.418  33.848  1.00 16.48           C
ATOM   1690  O   ARG A 238      -0.066  14.171  33.431  1.00 16.46           O
ATOM   1691  CB  ARG A 238       1.384  12.559  36.147  1.00 16.54           C
ATOM   1692  CG  ARG A 238       2.203  12.700  37.431  1.00 16.13           C
ATOM   1693  CD  ARG A 238       3.705  12.514  37.243  1.00 15.74           C
ATOM   1694  NE  ARG A 238       4.444  12.574  38.504  1.00 15.07           N
ATOM   1695  CZ  ARG A 238       4.911  13.692  39.055  1.00 14.75           C
ATOM   1696  NH1 ARG A 238       4.720  14.868  38.470  1.00 14.70           N
ATOM   1697  NH2 ARG A 238       5.572  13.636  40.200  1.00 14.39           N
ATOM   1698  N   LEU A 239       1.201  12.323  33.196  1.00 16.31           N
ATOM   1699  CA  LEU A 239       0.558  11.895  31.957  1.00 16.06           C
ATOM   1700  C   LEU A 239      -0.842  11.341  32.235  1.00 15.95           C
ATOM   1701  O   LEU A 239      -1.054  10.670  33.245  1.00 15.97           O
ATOM   1702  CB  LEU A 239       1.427  10.862  31.226  1.00 16.07           C
ATOM   1703  CG  LEU A 239       2.710  11.394  30.570  1.00 15.69           C
ATOM   1704  CD1 LEU A 239       3.752  10.297  30.453  1.00 15.56           C
ATOM   1705  CD2 LEU A 239       2.437  12.016  29.207  1.00 15.32           C
ATOM   1706  N   PRO A 240      -1.797  11.632  31.350  1.00 15.91           N
ATOM   1707  CA  PRO A 240      -3.195  11.232  31.563  1.00 15.92           C
ATOM   1708  C   PRO A 240      -3.401   9.716  31.537  1.00 16.15           C
ATOM   1709  O   PRO A 240      -2.642   8.998  30.882  1.00 16.12           O
ATOM   1710  CB  PRO A 240      -3.928  11.889  30.390  1.00 15.96           C
ATOM   1711  CG  PRO A 240      -2.887  12.080  29.343  1.00 15.71           C
ATOM   1712  CD  PRO A 240      -1.619  12.363  30.081  1.00 15.78           C
ATOM   1713  N   GLN A 241      -4.423   9.249  32.251  1.00 16.28           N
ATOM   1714  CA  GLN A 241      -4.776   7.834  32.289  1.00 16.22           C
ATOM   1715  C   GLN A 241      -5.318   7.370  30.937  1.00 16.41           C
ATOM   1716  O   GLN A 241      -6.339   7.880  30.476  1.00 16.31           O
ATOM   1717  CB  GLN A 241      -5.807   7.580  33.392  1.00 16.16           C
ATOM   1718  CG  GLN A 241      -6.396   6.169  33.416  1.00 15.84           C
ATOM   1719  CD  GLN A 241      -7.098   5.847  34.722  1.00 16.00           C
ATOM   1720  OE1 GLN A 241      -7.395   6.746  35.513  1.00 15.65           O
ATOM   1721  NE2 GLN A 241      -7.365   4.563  34.953  1.00 15.90           N
ATOM   1722  N   PRO A 242      -4.641   6.408  30.305  1.00 16.79           N
ATOM   1723  CA  PRO A 242      -5.093   5.872  29.015  1.00 17.07           C
ATOM   1724  C   PRO A 242      -6.456   5.189  29.143  1.00 17.34           C
ATOM   1725  O   PRO A 242      -6.669   4.466  30.120  1.00 17.35           O
ATOM   1726  CB  PRO A 242      -4.005   4.855  28.655  1.00 16.94           C
ATOM   1727  CG  PRO A 242      -2.824   5.262  29.467  1.00 16.93           C
ATOM   1728  CD  PRO A 242      -3.397   5.759  30.759  1.00 16.83           C
ATOM   1729  N   PRO A 243      -7.358   5.437  28.188  1.00 17.55           N
ATOM   1730  CA  PRO A 243      -8.723   4.884  28.207  1.00 17.67           C
ATOM   1731  C   PRO A 243      -8.818   3.395  28.553  1.00 17.80           C
ATOM   1732  O   PRO A 243      -9.696   3.017  29.325  1.00 18.11           O
ATOM   1733  CB  PRO A 243      -9.210   5.119  26.774  1.00 17.61           C
ATOM   1734  CG  PRO A 243      -8.473   6.326  26.321  1.00 17.59           C
ATOM   1735  CD  PRO A 243      -7.136   6.304  27.015  1.00 17.41           C
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FIG. 4CC

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ATOM   1736  N   ILE A 244      -7.929   2.575  28.003  1.00 18.01           N
ATOM   1737  CA  ILE A 244      -7.974   1.125  28.211  1.00 18.27           C
ATOM   1738  C   ILE A 244      -7.446   0.673  29.580  1.00 18.61           C
ATOM   1739  O   ILE A 244      -7.552  -0.509  29.928  1.00 18.60           O
ATOM   1740  CB  ILE A 244      -7.228   0.372  27.066  1.00 18.29           C
ATOM   1741  CG1 ILE A 244      -5.718   0.636  27.127  1.00 18.33           C
ATOM   1742  CD1 ILE A 244      -4.873  -0.598  26.924  1.00 18.55           C
ATOM   1743  CG2 ILE A 244      -7.808   0.739  25.697  1.00 17.76           C
ATOM   1744  N   CYS A 245      -6.894   1.611  30.350  1.00 18.75           N
ATOM   1745  CA  CYS A 245      -6.241   1.294  31.621  1.00 18.94           C
ATOM   1746  C   CYS A 245      -7.163   1.371  32.835  1.00 19.33           C
ATOM   1747  O   CYS A 245      -7.803   2.401  33.076  1.00 19.54           O
ATOM   1748  CB  CYS A 245      -5.045   2.219  31.850  1.00 18.88           C
ATOM   1749  SG  CYS A 245      -3.640   1.920  30.767  1.00 18.26           S
ATOM   1750  N   THR A 246      -7.209   0.282  33.601  1.00 19.58           N
ATOM   1751  CA  THR A 246      -7.842   0.285  34.919  1.00 19.83           C
ATOM   1752  C   THR A 246      -6.909   0.989  35.901  1.00 20.24           C
ATOM   1753  O   THR A 246      -5.705   1.103  35.645  1.00 20.07           O
ATOM   1754  CB  THR A 246      -8.133  -1.149  35.412  1.00 19.83           C
ATOM   1755  OG1 THR A 246      -6.934  -1.932  35.349  1.00 19.85           O
ATOM   1756  CG2 THR A 246      -9.100  -1.875  34.475  1.00 19.57           C
ATOM   1757  N   ILE A 247      -7.462   1.442  37.026  1.00 20.58           N
ATOM   1758  CA  ILE A 247      -6.696   2.196  38.018  1.00 21.02           C
ATOM   1759  C   ILE A 247      -5.422   1.480  38.486  1.00 21.30           C
ATOM   1760  O   ILE A 247      -4.440   2.132  38.836  1.00 21.66           O
ATOM   1761  CB  ILE A 247      -7.601   2.625  39.217  1.00 21.12           C
ATOM   1762  CG1 ILE A 247      -7.055   3.896  39.879  1.00 21.08           C
ATOM   1763  CG2 ILE A 247      -7.773   1.492  40.237  1.00 21.11           C
ATOM   1764  N   ASP A 248      -5.445   0.148  38.468  1.00 21.38           N
ATOM   1765  CA  ASP A 248      -4.304  -0.669  38.876  1.00 21.33           C
ATOM   1766  C   ASP A 248      -3.125  -0.552  37.911  1.00 21.12           C
ATOM   1767  O   ASP A 248      -1.973  -0.521  38.342  1.00 21.35           O
ATOM   1768  CB  ASP A 248      -4.721  -2.137  39.016  1.00 21.74           C
ATOM   1769  CG  ASP A 248      -4.978  -2.543  40.458  1.00 22.18           C
ATOM   1770  OD1 ASP A 248      -5.164  -3.753  40.710  1.00 22.94           O
ATOM   1771  OD2 ASP A 248      -5.013  -1.730  41.406  1.00 22.65           O
ATOM   1772  N   VAL A 249      -3.415  -0.498  36.612  1.00 20.65           N
ATOM   1773  CA  VAL A 249      -2.374  -0.357  35.594  1.00 20.23           C
ATOM   1774  C   VAL A 249      -1.845   1.078  35.553  1.00 19.95           C
ATOM   1775  O   VAL A 249      -0.646   1.296  35.370  1.00 20.00           O
ATOM   1776  CB  VAL A 249      -2.860  -0.798  34.185  1.00 20.14           C
ATOM   1777  CG1 VAL A 249      -1.767  -0.592  33.136  1.00 20.21           C
ATOM   1778  CG2 VAL A 249      -3.293  -2.250  34.197  1.00 19.95           C
ATOM   1779  N   TYR A 250      -2.740   2.046  35.731  1.00 19.73           N
ATOM   1780  CA  TYR A 250      -2.360   3.459  35.734  1.00 19.51           C
ATOM   1781  C   TYR A 250      -1.520   3.830  36.954  1.00 19.47           C
ATOM   1782  O   TYR A 250      -0.626   4.664  36.855  1.00 19.63           O
ATOM   1783  CB  TYR A 250      -3.591   4.368  35.632  1.00 19.26           C
ATOM   1784  CG  TYR A 250      -3.264   5.851  35.610  1.00 18.79           C
ATOM   1785  CD1 TYR A 250      -3.859   6.728  36.517  1.00 17.98           C
ATOM   1786  CE1 TYR A 250      -3.565   8.087  36.502  1.00 17.77           C
ATOM   1787  CZ  TYR A 250      -2.665   8.585  35.572  1.00 17.96           C
ATOM   1788  OH  TYR A 250      -2.374   9.927  35.557  1.00 17.47           O
ATOM   1789  CE2 TYR A 250      -2.056   7.737  34.660  1.00 18.16           C
ATOM   1790  CD2 TYR A 250      -2.359   6.377  34.681  1.00 18.36           C
ATOM   1791  N   MET A 251      -1.802   3.196  38.090  1.00 19.53           N
ATOM   1792  CA  MET A 251      -1.063   3.440  39.329  1.00 19.50           C
ATOM   1793  C   MET A 251       0.399   3.008  39.262  1.00 19.37           C
ATOM   1794  O   MET A 251       1.243   3.580  39.954  1.00 19.54           O
ATOM   1795  CB  MET A 251      -1.748   2.754  40.511  1.00 19.55           C
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FIG. 4DD

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ATOM   1796  CG  MET A 251      -2.869   3.569  41.127  1.00 19.98           C
ATOM   1797  SD  MET A 251      -2.379   5.234  41.621  1.00 20.75           S
ATOM   1798  CE  MET A 251      -1.468   4.872  43.146  1.00 20.68           C
ATOM   1799  N   ILE A 252       0.689   2.002  38.438  1.00 19.21           N
ATOM   1800  CA  ILE A 252       2.055   1.515  38.253  1.00 19.06           C
ATOM   1801  C   ILE A 252       2.938   2.592  37.623  1.00 19.04           C
ATOM   1802  O   ILE A 252       4.014   2.889  38.142  1.00 18.95           O
ATOM   1803  CB  ILE A 252       2.075   0.202  37.418  1.00 19.10           C
ATOM   1804  CG1 ILE A 252       1.766  -1.004  38.312  1.00 18.99           C
ATOM   1805  CD1 ILE A 252       1.608  -2.317  37.560  1.00 19.04           C
ATOM   1806  CG2 ILE A 252       3.422   0.016  36.714  1.00 18.99           C
ATOM   1807  N   MET A 253       2.477   3.181  36.519  1.00 19.01           N
ATOM   1808  CA  MET A 253       3.243   4.228  35.838  1.00 19.12           C
ATOM   1809  C   MET A 253       3.331   5.486  36.695  1.00 18.66           C
ATOM   1810  O   MET A 253       4.376   6.135  36.734  1.00 18.54           O
ATOM   1811  CB  MET A 253       2.692   4.550  34.435  1.00 19.34           C
ATOM   1812  CG  MET A 253       1.258   4.113  34.173  1.00 20.34           C
ATOM   1813  SD  MET A 253       0.800   4.219  32.431  1.00 21.21           S
ATOM   1814  CE  MET A 253      -0.398   2.920  32.333  1.00 21.00           C
ATOM   1815  N   VAL A 254       2.237   5.807  37.388  1.00 18.26           N
ATOM   1816  CA  VAL A 254       2.202   6.913  38.348  1.00 17.77           C
ATOM   1817  C   VAL A 254       3.262   6.732  39.443  1.00 17.57           C
ATOM   1818  O   VAL A 254       3.895   7.702  39.872  1.00 17.53           O
ATOM   1819  CB  VAL A 254       0.785   7.094  38.960  1.00 17.70           C
ATOM   1820  CG1 VAL A 254       0.817   7.966  40.221  1.00 17.51           C
ATOM   1821  CG2 VAL A 254      -0.156   7.698  37.936  1.00 17.34           C
ATOM   1822  N   LYS A 255       3.460   5.486  39.870  1.00 17.14           N
ATOM   1823  CA  LYS A 255       4.492   5.147  40.846  1.00 16.92           C
ATOM   1824  C   LYS A 255       5.906   5.322  40.278  1.00 16.85           C
ATOM   1825  O   LYS A 255       6.825   5.713  40.999  1.00 16.73           O
ATOM   1826  CB  LYS A 255       4.293   3.720  41.361  1.00 16.79           C
ATOM   1827  CG  LYS A 255       3.657   3.641  42.738  1.00 16.86           C
ATOM   1828  N   CYS A 256       6.070   5.033  38.986  1.00 16.84           N
ATOM   1829  CA  CYS A 256       7.348   5.210  38.295  1.00 16.76           C
ATOM   1830  C   CYS A 256       7.744   6.689  38.186  1.00 17.05           C
ATOM   1831  O   CYS A 256       8.917   7.006  37.978  1.00 17.06           O
ATOM   1832  CB  CYS A 256       7.308   4.577  36.897  1.00 16.68           C
ATOM   1833  SG  CYS A 256       6.894   2.809  36.822  1.00 16.67           S
ATOM   1834  N   TRP A 257       6.766   7.584  38.336  1.00 17.20           N
ATOM   1835  CA  TRP A 257       6.990   9.021  38.175  1.00 17.29           C
ATOM   1836  C   TRP A 257       7.052   9.803  39.496  1.00 17.59           C
ATOM   1837  O   TRP A 257       6.770  11.006  39.525  1.00 17.52           O
ATOM   1838  CB  TRP A 257       5.932   9.632  37.249  1.00 17.24           C
ATOM   1839  CG  TRP A 257       5.797   8.962  35.906  1.00 17.23           C
ATOM   1840  CD1 TRP A 257       6.798   8.421  35.148  1.00 16.77           C
ATOM   1841  NE1 TRP A 257       6.283   7.904  33.984  1.00 16.80           N
ATOM   1842  CE2 TRP A 257       4.928   8.104  33.966  1.00 16.76           C
ATOM   1843  CD2 TRP A 257       4.587   8.774  35.161  1.00 17.00           C
ATOM   1844  CE3 TRP A 257       3.240   9.098  35.387  1.00 17.15           C
ATOM   1845  CZ3 TRP A 257       2.295   8.752  34.424  1.00 17.26           C
ATOM   1846  CH2 TRP A 257       2.673   8.087  33.246  1.00 17.22           C
ATOM   1847  CZ2 TRP A 257       3.979   7.756  33.000  1.00 16.76           C
ATOM   1848  N   MET A 258       7.430   9.125  40.578  1.00 17.84           N
ATOM   1849  CA  MET A 258       7.608   9.779  41.875  1.00 18.16           C
ATOM   1850  C   MET A 258       8.911  10.575  41.903  1.00 18.02           C
ATOM   1851  O   MET A 258       9.950  10.085  41.457  1.00 17.98           O
ATOM   1852  CB  MET A 258       7.612   8.751  43.013  1.00 18.55           C
ATOM   1853  CG  MET A 258       6.344   7.913  43.129  1.00 19.22           C
ATOM   1854  SD  MET A 258       5.036   8.729  44.044  1.00 20.53           S
ATOM   1855  CE  MET A 258       3.632   7.680  43.650  1.00 20.24           C
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FIG. 4EE

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ATOM   1856  N   ILE A 259       8.846  11.798  42.431  1.00 17.95           N
ATOM   1857  CA  ILE A 259      10.022  12.661  42.582  1.00 17.79           C
ATOM   1858  C   ILE A 259      11.094  11.995  43.455  1.00 17.91           C
ATOM   1859  O   ILE A 259      12.285  12.090  43.161  1.00 18.16           O
ATOM   1860  CB  ILE A 259       9.624  14.065  43.138  1.00 17.79           C
ATOM   1861  CG1 ILE A 259       8.462  14.678  42.337  1.00 17.48           C
ATOM   1862  CD1 ILE A 259       8.711  14.852  40.839  1.00 16.82           C
ATOM   1863  CG2 ILE A 259      10.836  15.017  43.191  1.00 17.37           C
ATOM   1864  N   ASP A 260      10.664  11.317  44.517  1.00 18.02           N
ATOM   1865  CA  ASP A 260      11.561  10.477  45.304  1.00 18.12           C
ATOM   1866  C   ASP A 260      11.792   9.145  44.586  1.00 18.28           C
ATOM   1867  O   ASP A 260      10.884   8.311  44.479  1.00 18.14           O
ATOM   1868  CB  ASP A 260      11.012  10.251  46.715  1.00 18.08           C
ATOM   1869  CG  ASP A 260      11.809   9.215  47.492  1.00 18.62           C
ATOM   1870  OD1 ASP A 260      11.221   8.184  47.877  1.00 19.78           O
ATOM   1871  OD2 ASP A 260      13.026   9.333  47.757  1.00 18.48           O
ATOM   1872  N   ALA A 261      13.018   8.961  44.103  1.00 18.38           N
ATOM   1873  CA  ALA A 261      13.400   7.789  43.320  1.00 18.68           C
ATOM   1874  C   ALA A 261      13.326   6.472  44.100  1.00 18.95           C
ATOM   1875  O   ALA A 261      13.216   5.402  43.503  1.00 18.96           O
ATOM   1876  CB  ALA A 261      14.794   7.986  42.733  1.00 18.57           C
ATOM   1877  N   ASP A 262      13.383   6.557  45.426  1.00 19.26           N
ATOM   1878  CA  ASP A 262      13.374   5.371  46.278  1.00 19.74           C
ATOM   1879  C   ASP A 262      11.964   4.836  46.560  1.00 19.82           C
ATOM   1880  O   ASP A 262      11.804   3.704  47.028  1.00 19.80           O
ATOM   1881  CB  ASP A 262      14.132   5.642  47.581  1.00 20.09           C
ATOM   1882  CG  ASP A 262      15.614   5.901  47.351  1.00 21.02           C
ATOM   1883  OD1 ASP A 262      16.277   5.063  46.698  1.00 21.63           O
ATOM   1884  OD2 ASP A 262      16.204   6.917  47.780  1.00 22.09           O
ATOM   1885  N   SER A 263      10.949   5.651  46.278  1.00 19.82           N
ATOM   1886  CA  SER A 263       9.557   5.206  46.364  1.00 19.58           C
ATOM   1887  C   SER A 263       9.039   4.767  44.995  1.00 19.43           C
ATOM   1888  O   SER A 263       7.870   4.409  44.844  1.00 19.46           O
ATOM   1889  CB  SER A 263       8.657   6.290  46.969  1.00 19.57           C
ATOM   1890  OG  SER A 263       9.103   7.588  46.628  1.00 19.24           O
ATOM   1891  N   ARG A 264       9.920   4.802  44.000  1.00 19.32           N
ATOM   1892  CA  ARG A 264       9.621   4.260  42.682  1.00 19.28           C
ATOM   1893  C   ARG A 264       9.760   2.744  42.752  1.00 19.36           C
ATOM   1894  O   ARG A 264      10.562   2.241  43.541  1.00 19.44           O
ATOM   1895  CB  ARG A 264      10.589   4.820  41.640  1.00 19.23           C
ATOM   1896  CG  ARG A 264      10.261   6.214  41.140  1.00 18.85           C
ATOM   1897  CD  ARG A 264      11.255   6.744  40.121  1.00 18.49           C
ATOM   1898  NE  ARG A 264      11.374   8.199  40.175  1.00 18.10           N
ATOM   1899  CZ  ARG A 264      12.469   8.880  39.860  1.00 18.13           C
ATOM   1900  NH1 ARG A 264      12.470  10.204  39.947  1.00 18.53           N
ATOM   1901  NH2 ARG A 264      13.565   8.250  39.461  1.00 17.66           N
ATOM   1902  N   PRO A 265       8.986   2.015  41.946  1.00 19.45           N
ATOM   1903  CA  PRO A 265       9.109   0.555  41.880  1.00 19.40           C
ATOM   1904  C   PRO A 265      10.481   0.126  41.366  1.00 19.49           C
ATOM   1905  O   PRO A 265      11.147   0.889  40.661  1.00 19.38           O
ATOM   1906  CB  PRO A 265       8.035   0.159  40.863  1.00 19.41           C
ATOM   1907  CG  PRO A 265       7.092   1.299  40.831  1.00 19.37           C
ATOM   1908  CD  PRO A 265       7.933   2.513  41.042  1.00 19.62           C
ATOM   1909  N   LYS A 266      10.902  -1.076  41.741  1.00 19.55           N
ATOM   1910  CA  LYS A 266      12.093  -1.683  41.168  1.00 19.72           C
ATOM   1911  C   LYS A 266      11.668  -2.493  39.947  1.00 19.86           C
ATOM   1912  O   LYS A 266      10.489  -2.828  39.805  1.00 19.92           O
ATOM   1913  CB  LYS A 266      12.794  -2.570  42.197  1.00 19.77           C
ATOM   1914  CG  LYS A 266      13.578  -1.796  43.252  1.00 19.79           C
ATOM   1915  N   PHE A 267      12.617  -2.792  39.064  1.00 20.07           N
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FIG. 4FF

```
ATOM   1916  CA  PHE A 267      12.329  -3.570  37.858  1.00 20.25           C
ATOM   1917  C   PHE A 267      11.921  -5.004  38.184  1.00 20.45           C
ATOM   1918  O   PHE A 267      11.101  -5.592  37.477  1.00 20.54           O
ATOM   1919  CB  PHE A 267      13.519  -3.559  36.899  1.00 20.10           C
ATOM   1920  CG  PHE A 267      13.692  -2.261  36.159  1.00 20.16           C
ATOM   1921  CD1 PHE A 267      12.646  -1.718  35.417  1.00 19.83           C
ATOM   1922  CE1 PHE A 267      12.806  -0.521  34.734  1.00 19.70           C
ATOM   1923  CZ  PHE A 267      14.022   0.144  34.784  1.00 19.60           C
ATOM   1924  CE2 PHE A 267      15.074  -0.387  35.519  1.00 19.37           C
ATOM   1925  CD2 PHE A 267      14.907  -1.581  36.200  1.00 19.75           C
ATOM   1926  N   ARG A 268      12.493  -5.549  39.256  1.00 20.64           N
ATOM   1927  CA  ARG A 268      12.136  -6.879  39.753  1.00 21.04           C
ATOM   1928  C   ARG A 268      10.682  -6.934  40.230  1.00 20.95           C
ATOM   1929  O   ARG A 268      10.012  -7.954  40.077  1.00 21.04           O
ATOM   1930  CB  ARG A 268      13.094  -7.327  40.871  1.00 21.21           C
ATOM   1931  CG  ARG A 268      13.206  -6.369  42.059  1.00 22.16           C
ATOM   1932  CD  ARG A 268      13.475  -7.044  43.399  1.00 23.52           C
ATOM   1933  NE  ARG A 268      12.283  -7.695  43.948  1.00 24.25           N
ATOM   1934  CZ  ARG A 268      11.683  -7.351  45.086  1.00 24.66           C
ATOM   1935  NH1 ARG A 268      10.605  -8.012  45.487  1.00 24.72           N
ATOM   1936  NH2 ARG A 268      12.150  -6.349  45.825  1.00 24.70           N
ATOM   1937  N   GLU A 269      10.210  -5.829  40.802  1.00 20.99           N
ATOM   1938  CA  GLU A 269       8.831  -5.702  41.259  1.00 21.07           C
ATOM   1939  C   GLU A 269       7.869  -5.607  40.082  1.00 20.97           C
ATOM   1940  O   GLU A 269       6.783  -6.190  40.113  1.00 20.98           O
ATOM   1941  CB  GLU A 269       8.679  -4.466  42.143  1.00 21.30           C
ATOM   1942  CG  GLU A 269       8.849  -4.734  43.626  1.00 22.18           C
ATOM   1943  CD  GLU A 269       9.776  -3.741  44.300  1.00 23.49           C
ATOM   1944  OE1 GLU A 269       9.790  -2.556  43.891  1.00 23.93           O
ATOM   1945  OE2 GLU A 269      10.490  -4.148  45.245  1.00 24.30           O
ATOM   1946  N   LEU A 270       8.276  -4.870  39.050  1.00 20.82           N
ATOM   1947  CA  LEU A 270       7.459  -4.681  37.854  1.00 20.61           C
ATOM   1948  C   LEU A 270       7.276  -5.980  37.066  1.00 20.44           C
ATOM   1949  O   LEU A 270       6.268  -6.147  36.380  1.00 20.53           O
ATOM   1950  CB  LEU A 270       8.039  -3.578  36.959  1.00 20.71           C
ATOM   1951  CG  LEU A 270       8.118  -2.152  37.527  1.00 20.96           C
ATOM   1952  CD1 LEU A 270       9.217  -1.353  36.839  1.00 20.93           C
ATOM   1953  CD2 LEU A 270       6.787  -1.418  37.427  1.00 20.87           C
ATOM   1954  N   ILE A 271       8.247  -6.890  37.170  1.00 20.18           N
ATOM   1955  CA  ILE A 271       8.133  -8.228  36.581  1.00 19.92           C
ATOM   1956  C   ILE A 271       6.982  -8.990  37.237  1.00 19.70           C
ATOM   1957  O   ILE A 271       6.123  -9.537  36.548  1.00 19.56           O
ATOM   1958  CB  ILE A 271       9.464  -9.031  36.715  1.00 19.98           C
ATOM   1959  CG1 ILE A 271      10.578  -8.389  35.886  1.00 19.93           C
ATOM   1960  CD1 ILE A 271      11.972  -8.724  36.371  1.00 19.76           C
ATOM   1961  CG2 ILE A 271       9.273 -10.497  36.293  1.00 19.42           C
ATOM   1962  N   ILE A 272       6.976  -9.001  38.568  1.00 19.54           N
ATOM   1963  CA  ILE A 272       5.958  -9.693  39.356  1.00 19.56           C
ATOM   1964  C   ILE A 272       4.554  -9.131  39.111  1.00 19.55           C
ATOM   1965  O   ILE A 272       3.623  -9.886  38.830  1.00 19.71           O
ATOM   1966  CB  ILE A 272       6.320  -9.649  40.875  1.00 19.63           C
ATOM   1967  CG1 ILE A 272       7.697 -10.290  41.147  1.00 19.53           C
ATOM   1968  CD1 ILE A 272       7.821 -11.773  40.799  1.00 19.36           C
ATOM   1969  CG2 ILE A 272       5.199 -10.254  41.743  1.00 19.53           C
ATOM   1970  N   GLU A 273       4.416  -7.810  39.205  1.00 19.52           N
ATOM   1971  CA  GLU A 273       3.118  -7.147  39.072  1.00 19.50           C
ATOM   1972  C   GLU A 273       2.456  -7.383  37.714  1.00 19.70           C
ATOM   1973  O   GLU A 273       1.312  -7.836  37.652  1.00 19.62           O
ATOM   1974  CB  GLU A 273       3.249  -5.647  39.345  1.00 19.34           C
ATOM   1975  N   PHE A 274       3.186  -7.085  36.638  1.00 19.92           N
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FIG. 4GG

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ATOM   1976  CA  PHE A 274       2.662  -7.188  35.274  1.00 19.98           C
ATOM   1977  C   PHE A 274       2.405  -8.622  34.801  1.00 20.26           C
ATOM   1978  O   PHE A 274       1.515  -8.851  33.982  1.00 20.43           O
ATOM   1979  CB  PHE A 274       3.586  -6.470  34.285  1.00 19.73           C
ATOM   1980  CG  PHE A 274       3.310  -4.999  34.153  1.00 19.51           C
ATOM   1981  CD1 PHE A 274       2.072  -4.543  33.711  1.00 19.39           C
ATOM   1982  CE1 PHE A 274       1.816  -3.181  33.591  1.00 19.49           C
ATOM   1983  CZ  PHE A 274       2.806  -2.260  33.913  1.00 19.02           C
ATOM   1984  CE2 PHE A 274       4.045  -2.706  34.354  1.00 18.83           C
ATOM   1985  CD2 PHE A 274       4.291  -4.067  34.471  1.00 18.97           C
ATOM   1986  N   SER A 275       3.186  -9.579  35.300  1.00 20.63           N
ATOM   1987  CA  SER A 275       2.982 -10.986  34.945  1.00 21.17           C
ATOM   1988  C   SER A 275       1.764 -11.574  35.660  1.00 21.54           C
ATOM   1989  O   SER A 275       1.128 -12.501  35.149  1.00 21.55           O
ATOM   1990  CB  SER A 275       4.235 -11.818  35.221  1.00 20.92           C
ATOM   1991  OG  SER A 275       4.554 -11.809  36.596  1.00 21.07           O
ATOM   1992  N   LYS A 276       1.454 -11.030  36.838  1.00 22.01           N
ATOM   1993  CA  LYS A 276       0.203 -11.322  37.538  1.00 22.52           C
ATOM   1994  C   LYS A 276      -0.985 -10.798  36.731  1.00 22.84           C
ATOM   1995  O   LYS A 276      -2.021 -11.459  36.632  1.00 23.00           O
ATOM   1996  CB  LYS A 276       0.203 -10.689  38.931  1.00 22.47           C
ATOM   1997  CG  LYS A 276       0.871 -11.533  39.997  1.00 23.00           C
ATOM   1998  CD  LYS A 276       1.188 -10.716  41.237  1.00 23.49           C
ATOM   1999  CE  LYS A 276       1.590 -11.615  42.394  1.00 23.73           C
ATOM   2000  NZ  LYS A 276       2.144 -10.839  43.539  1.00 24.02           N
ATOM   2001  N   MET A 277      -0.816  -9.609  36.154  1.00 23.18           N
ATOM   2002  CA  MET A 277      -1.831  -8.988  35.308  1.00 23.62           C
ATOM   2003  C   MET A 277      -1.952  -9.696  33.959  1.00 23.92           C
ATOM   2004  O   MET A 277      -3.026  -9.717  33.360  1.00 23.88           O
ATOM   2005  CB  MET A 277      -1.526  -7.501  35.103  1.00 23.54           C
ATOM   2006  CG  MET A 277      -1.647  -6.654  36.366  1.00 23.73           C
ATOM   2007  SD  MET A 277      -1.239  -4.919  36.090  1.00 23.64           S
ATOM   2008  CE  MET A 277      -1.698  -4.208  37.645  1.00 23.72           C
ATOM   2009  N   ALA A 278      -0.845 -10.268  33.489  1.00 24.44           N
ATOM   2010  CA  ALA A 278      -0.821 -11.034  32.240  1.00 24.93           C
ATOM   2011  C   ALA A 278      -1.600 -12.348  32.353  1.00 25.26           C
ATOM   2012  O   ALA A 278      -2.041 -12.901  31.344  1.00 25.34           O
ATOM   2013  CB  ALA A 278       0.614 -11.299  31.804  1.00 24.73           C
ATOM   2014  N   ARG A 279      -1.766 -12.837  33.581  1.00 25.71           N
ATOM   2015  CA  ARG A 279      -2.548 -14.043  33.847  1.00 26.32           C
ATOM   2016  C   ARG A 279      -4.062 -13.809  33.737  1.00 26.68           C
ATOM   2017  O   ARG A 279      -4.822 -14.748  33.492  1.00 26.80           O
ATOM   2018  CB  ARG A 279      -2.192 -14.619  35.222  1.00 26.38           C
ATOM   2019  CG  ARG A 279      -0.915 -15.453  35.231  1.00 26.37           C
ATOM   2020  CD  ARG A 279      -0.292 -15.630  36.604  1.00 25.96           C
ATOM   2021  N   ASP A 280      -4.484 -12.559  33.926  1.00 27.14           N
ATOM   2022  CA  ASP A 280      -5.885 -12.158  33.796  1.00 27.50           C
ATOM   2023  C   ASP A 280      -5.966 -10.837  33.021  1.00 27.75           C
ATOM   2024  O   ASP A 280      -6.248  -9.786  33.605  1.00 27.91           O
ATOM   2025  CB  ASP A 280      -6.523 -12.006  35.182  1.00 27.63           C
ATOM   2026  CG  ASP A 280      -8.025 -12.247  35.174  1.00 28.04           C
ATOM   2027  OD1 ASP A 280      -8.734 -11.648  34.338  1.00 28.59           O
ATOM   2028  OD2 ASP A 280      -8.590 -13.015  35.980  1.00 28.47           O
ATOM   2029  N   PRO A 281      -5.729 -10.895  31.709  1.00 27.81           N
ATOM   2030  CA  PRO A 281      -5.502  -9.690  30.895  1.00 27.88           C
ATOM   2031  C   PRO A 281      -6.682  -8.719  30.823  1.00 28.00           C
ATOM   2032  O   PRO A 281      -6.471  -7.508  30.918  1.00 27.90           O
ATOM   2033  CB  PRO A 281      -5.204 -10.258  29.502  1.00 27.85           C
ATOM   2034  CG  PRO A 281      -4.835 -11.674  29.739  1.00 27.90           C
ATOM   2035  CD  PRO A 281      -5.669 -12.121  30.894  1.00 27.81           C
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FIG. 4HH

ATOM	2036	N	GLN	A	282	-7.895	-9.244	30.659	1.00	28.19	N
ATOM	2037	CA	GLN	A	282	-9.088	-8.413	30.492	1.00	28.23	C
ATOM	2038	C	GLN	A	282	-9.601	-7.824	31.812	1.00	28.18	C
ATOM	2039	O	GLN	A	282	-10.509	-6.990	31.816	1.00	28.24	O
ATOM	2040	CB	GLN	A	282	-10.187	-9.195	29.765	1.00	28.37	C
ATOM	2041	CG	GLN	A	282	-9.932	-9.339	28.268	1.00	29.06	C
ATOM	2042	CD	GLN	A	282	-10.875	-10.312	27.589	1.00	29.88	C
ATOM	2043	OE1	GLN	A	282	-12.044	-9.995	27.358	1.00	30.65	O
ATOM	2044	NE2	GLN	A	282	-10.368	-11.494	27.256	1.00	29.87	N
ATOM	2045	N	ARG	A	283	-9.011	-8.257	32.923	1.00	28.06	N
ATOM	2046	CA	ARG	A	283	-9.304	-7.690	34.235	1.00	28.09	C
ATOM	2047	C	ARG	A	283	-8.652	-6.317	34.387	1.00	27.94	C
ATOM	2048	O	ARG	A	283	-9.215	-5.415	35.010	1.00	27.90	O
ATOM	2049	CB	ARG	A	283	-8.808	-8.627	35.343	1.00	28.28	C
ATOM	2050	CG	ARG	A	283	-9.257	-8.252	36.752	1.00	28.68	C
ATOM	2051	CD	ARG	A	283	-8.664	-9.127	37.844	1.00	29.47	C
ATOM	2052	NE	ARG	A	283	-8.775	-8.510	39.165	1.00	30.16	N
ATOM	2053	CZ	ARG	A	283	-8.645	-9.161	40.318	1.00	30.73	C
ATOM	2054	NH1	ARG	A	283	-8.394	-10.467	40.333	1.00	30.92	N
ATOM	2055	NH2	ARG	A	283	-8.767	-8.505	41.465	1.00	30.86	N
ATOM	2056	N	TYR	A	284	-7.465	-6.171	33.806	1.00	27.76	N
ATOM	2057	CA	TYR	A	284	-6.640	-4.989	34.024	1.00	27.59	C
ATOM	2058	C	TYR	A	284	-6.608	-4.036	32.831	1.00	27.61	C
ATOM	2059	O	TYR	A	284	-6.302	-2.853	32.990	1.00	27.37	O
ATOM	2060	CB	TYR	A	284	-5.226	-5.405	34.432	1.00	27.46	C
ATOM	2061	CG	TYR	A	284	-5.177	-6.173	35.735	1.00	27.33	C
ATOM	2062	CD1	TYR	A	284	-5.194	-7.568	35.744	1.00	27.09	C
ATOM	2063	CE1	TYR	A	284	-5.150	-8.280	36.936	1.00	26.78	C
ATOM	2064	CZ	TYR	A	284	-5.093	-7.595	38.136	1.00	26.76	C
ATOM	2065	OH	TYR	A	284	-5.051	-8.299	39.315	1.00	26.68	O
ATOM	2066	CE2	TYR	A	284	-5.078	-6.209	38.157	1.00	26.83	C
ATOM	2067	CD2	TYR	A	284	-5.121	-5.506	36.960	1.00	27.00	C
ATOM	2068	N	LEU	A	285	-6.924	-4.552	31.645	1.00	27.69	N
ATOM	2069	CA	LEU	A	285	-7.037	-3.721	30.449	1.00	27.89	C
ATOM	2070	C	LEU	A	285	-8.373	-3.941	29.751	1.00	28.17	C
ATOM	2071	O	LEU	A	285	-8.772	-5.081	29.506	1.00	28.31	O
ATOM	2072	CB	LEU	A	285	-5.876	-3.975	29.480	1.00	27.76	C
ATOM	2073	CG	LEU	A	285	-4.447	-3.602	29.900	1.00	27.57	C
ATOM	2074	CD1	LEU	A	285	-3.470	-3.959	28.794	1.00	27.30	C
ATOM	2075	CD2	LEU	A	285	-4.314	-2.125	30.277	1.00	27.55	C
ATOM	2076	N	VAL	A	286	-9.058	-2.844	29.437	1.00	28.61	N
ATOM	2077	CA	VAL	A	286	-10.371	-2.903	28.792	1.00	28.82	C
ATOM	2078	C	VAL	A	286	-10.282	-2.511	27.314	1.00	29.03	C
ATOM	2079	O	VAL	A	286	-10.167	-1.331	26.972	1.00	29.00	O
ATOM	2080	CB	VAL	A	286	-11.425	-2.038	29.539	1.00	28.82	C
ATOM	2081	CG1	VAL	A	286	-12.804	-2.183	28.900	1.00	28.77	C
ATOM	2082	CG2	VAL	A	286	-11.481	-2.417	31.016	1.00	28.38	C
ATOM	2083	N	ILE	A	287	-10.331	-3.522	26.452	1.00	29.44	N
ATOM	2084	CA	ILE	A	287	-10.239	-3.340	25.005	1.00	29.87	C
ATOM	2085	C	ILE	A	287	-11.505	-3.880	24.332	1.00	30.08	C
ATOM	2086	O	ILE	A	287	-12.022	-4.929	24.724	1.00	30.14	O
ATOM	2087	CB	ILE	A	287	-8.960	-4.036	24.463	1.00	29.91	C
ATOM	2088	CG1	ILE	A	287	-7.716	-3.229	24.842	1.00	30.14	C
ATOM	2089	CD1	ILE	A	287	-6.609	-4.059	25.452	1.00	30.12	C
ATOM	2090	CG2	ILE	A	287	-9.014	-4.227	22.949	1.00	30.04	C
ATOM	2091	N	GLN	A	288	-11.996	-3.147	23.330	1.00	30.42	N
ATOM	2092	CA	GLN	A	288	-13.221	-3.495	22.605	1.00	30.66	C
ATOM	2093	C	GLN	A	288	-13.100	-4.820	21.847	1.00	30.64	C
ATOM	2094	O	GLN	A	288	-12.458	-4.898	20.796	1.00	30.62	O
ATOM	2095	CB	GLN	A	288	-13.610	-2.370	21.638	1.00	30.72	C

FIG. 4II

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ATOM   2096  CG  GLN A 288     -14.354  -1.206  22.280  1.00 31.26           C
ATOM   2097  CD  GLN A 288     -14.691  -0.101  21.286  1.00 32.11           C
ATOM   2098  OE1 GLN A 288     -15.299  -0.355  20.242  1.00 32.33           O
ATOM   2099  NE2 GLN A 288     -14.301   1.126  21.610  1.00 32.21           N
TER    2100      GLN A 288
ATOM   2101  N   LEU B   9      47.691   6.198   5.619  1.00 33.98           N
ATOM   2102  CA  LEU B   9      49.166   6.110   5.822  1.00 34.01           C
ATOM   2103  C   LEU B   9      49.937   7.098   4.952  1.00 33.88           C
ATOM   2104  O   LEU B   9      49.419   7.605   3.955  1.00 33.80           O
ATOM   2105  CB  LEU B   9      49.665   4.687   5.554  1.00 34.13           C
ATOM   2106  CG  LEU B   9      50.103   3.870   6.774  1.00 34.26           C
ATOM   2107  CD1 LEU B   9      49.775   2.399   6.561  1.00 34.63           C
ATOM   2108  CD2 LEU B   9      51.587   4.057   7.066  1.00 33.89           C
ATOM   2109  N   LEU B  10      51.181   7.355   5.347  1.00 33.81           N
ATOM   2110  CA  LEU B  10      52.079   8.246   4.622  1.00 33.84           C
ATOM   2111  C   LEU B  10      52.528   7.636   3.297  1.00 33.93           C
ATOM   2112  O   LEU B  10      52.716   6.421   3.189  1.00 33.83           O
ATOM   2113  CB  LEU B  10      53.294   8.585   5.494  1.00 33.78           C
ATOM   2114  CG  LEU B  10      54.397   9.519   4.982  1.00 33.65           C
ATOM   2115  CD1 LEU B  10      53.948  10.973   4.961  1.00 33.13           C
ATOM   2116  CD2 LEU B  10      55.644   9.353   5.835  1.00 33.69           C
ATOM   2117  N   ARG B  11      52.684   8.497   2.295  1.00 34.00           N
ATOM   2118  CA  ARG B  11      53.220   8.103   0.998  1.00 34.04           C
ATOM   2119  C   ARG B  11      54.595   8.736   0.796  1.00 34.14           C
ATOM   2120  O   ARG B  11      54.713   9.955   0.643  1.00 34.14           O
ATOM   2121  CB  ARG B  11      52.272   8.525  -0.130  1.00 34.00           C
ATOM   2122  CG  ARG B  11      51.030   7.660  -0.270  1.00 34.10           C
ATOM   2123  N   ILE B  12      55.636   7.909   0.824  1.00 34.28           N
ATOM   2124  CA  ILE B  12      56.974   8.368   0.474  1.00 34.31           C
ATOM   2125  C   ILE B  12      57.011   8.499  -1.042  1.00 34.41           C
ATOM   2126  O   ILE B  12      56.900   7.505  -1.768  1.00 34.55           O
ATOM   2127  CB  ILE B  12      58.066   7.393   0.978  1.00 34.30           C
ATOM   2128  CG1 ILE B  12      57.908   7.121   2.476  1.00 34.45           C
ATOM   2129  CD1 ILE B  12      58.011   5.655   2.848  1.00 34.43           C
ATOM   2130  CG2 ILE B  12      59.454   7.956   0.696  1.00 34.38           C
ATOM   2131  N   LEU B  13      57.143   9.734  -1.513  1.00 34.36           N
ATOM   2132  CA  LEU B  13      57.074  10.018  -2.939  1.00 34.39           C
ATOM   2133  C   LEU B  13      58.438  10.338  -3.529  1.00 34.49           C
ATOM   2134  O   LEU B  13      59.251  11.022  -2.904  1.00 34.59           O
ATOM   2135  CB  LEU B  13      56.094  11.167  -3.216  1.00 34.31           C
ATOM   2136  CG  LEU B  13      54.677  11.094  -2.629  1.00 34.02           C
ATOM   2137  CD1 LEU B  13      53.957  12.412  -2.843  1.00 33.52           C
ATOM   2138  CD2 LEU B  13      53.872   9.945  -3.226  1.00 33.81           C
ATOM   2139  N   LYS B  14      58.679   9.831  -4.735  1.00 34.55           N
ATOM   2140  CA  LYS B  14      59.860  10.193  -5.511  1.00 34.65           C
ATOM   2141  C   LYS B  14      59.681  11.616  -6.028  1.00 34.79           C
ATOM   2142  O   LYS B  14      58.549  12.055  -6.258  1.00 34.91           O
ATOM   2143  CB  LYS B  14      60.048   9.229  -6.686  1.00 34.65           C
ATOM   2144  CG  LYS B  14      60.455   7.815  -6.286  1.00 34.45           C
ATOM   2145  N   GLU B  15      60.790  12.332  -6.209  1.00 34.75           N
ATOM   2146  CA  GLU B  15      60.753  13.705  -6.722  1.00 34.75           C
ATOM   2147  C   GLU B  15      60.186  13.779  -8.145  1.00 34.70           C
ATOM   2148  O   GLU B  15      59.829  14.858  -8.625  1.00 34.80           O
ATOM   2149  CB  GLU B  15      62.145  14.342  -6.670  1.00 34.73           C
ATOM   2150  N   THR B  16      60.095  12.624  -8.798  1.00 34.65           N
ATOM   2151  CA  THR B  16      59.594  12.524 -10.167  1.00 34.59           C
ATOM   2152  C   THR B  16      58.074  12.325 -10.245  1.00 34.36           C
ATOM   2153  O   THR B  16      57.500  12.303 -11.337  1.00 34.30           O
ATOM   2154  CB  THR B  16      60.346  11.399 -10.932  1.00 34.67           C
ATOM   2155  OG1 THR B  16      60.009  11.452 -12.324  1.00 35.10           O
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FIG. 4JJ

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ATOM   2156  CG2 THR B  16      59.868  10.011 -10.494  1.00 34.46           C
ATOM   2157  N   GLU B  17      57.431  12.182  -9.087  1.00 34.13           N
ATOM   2158  CA  GLU B  17      55.993  11.911  -9.028  1.00 33.82           C
ATOM   2159  C   GLU B  17      55.158  13.170  -8.777  1.00 33.45           C
ATOM   2160  O   GLU B  17      53.932  13.099  -8.687  1.00 33.43           O
ATOM   2161  CB  GLU B  17      55.686  10.840  -7.974  1.00 33.93           C
ATOM   2162  CG  GLU B  17      56.287   9.475  -8.280  1.00 34.40           C
ATOM   2163  CD  GLU B  17      55.885   8.410  -7.278  1.00 34.89           C
ATOM   2164  OE1 GLU B  17      56.253   8.529  -6.088  1.00 35.15           O
ATOM   2165  OE2 GLU B  17      55.203   7.446  -7.684  1.00 35.28           O
ATOM   2166  N   PHE B  18      55.826  14.316  -8.669  1.00 33.09           N
ATOM   2167  CA  PHE B  18      55.151  15.596  -8.459  1.00 32.70           C
ATOM   2168  C   PHE B  18      55.930  16.763  -9.065  1.00 32.51           C
ATOM   2169  O   PHE B  18      57.148  16.684  -9.224  1.00 32.58           O
ATOM   2170  CB  PHE B  18      54.882  15.837  -6.964  1.00 32.63           C
ATOM   2171  CG  PHE B  18      56.125  16.021  -6.137  1.00 32.22           C
ATOM   2172  CD1 PHE B  18      56.610  17.296  -5.862  1.00 32.20           C
ATOM   2173  CE1 PHE B  18      57.758  17.473  -5.095  1.00 32.34           C
ATOM   2174  CZ  PHE B  18      58.430  16.367  -4.590  1.00 32.41           C
ATOM   2175  CE2 PHE B  18      57.950  15.088  -4.855  1.00 32.46           C
ATOM   2176  CD2 PHE B  18      56.800  14.923  -5.620  1.00 32.23           C
ATOM   2177  N   LYS B  19      55.218  17.839  -9.394  1.00 32.35           N
ATOM   2178  CA  LYS B  19      55.825  19.045  -9.957  1.00 32.30           C
ATOM   2179  C   LYS B  19      55.187  20.314  -9.389  1.00 32.32           C
ATOM   2180  O   LYS B  19      53.969  20.382  -9.220  1.00 32.35           O
ATOM   2181  CB  LYS B  19      55.709  19.037 -11.484  1.00 32.28           C
ATOM   2182  CG  LYS B  19      56.712  19.932 -12.198  1.00 32.23           C
ATOM   2183  N   LYS B  20      56.021  21.311  -9.100  1.00 32.26           N
ATOM   2184  CA  LYS B  20      55.560  22.590  -8.564  1.00 32.30           C
ATOM   2185  C   LYS B  20      55.272  23.570  -9.701  1.00 32.30           C
ATOM   2186  O   LYS B  20      56.129  23.809 -10.554  1.00 32.41           O
ATOM   2187  CB  LYS B  20      56.595  23.178  -7.597  1.00 32.35           C
ATOM   2188  CG  LYS B  20      57.022  22.234  -6.471  1.00 32.35           C
ATOM   2189  CD  LYS B  20      58.145  22.825  -5.622  1.00 32.48           C
ATOM   2190  CE  LYS B  20      59.525  22.510  -6.199  1.00 32.80           C
ATOM   2191  NZ  LYS B  20      59.966  21.116  -5.913  1.00 32.82           N
ATOM   2192  N   ILE B  21      54.066  24.136  -9.705  1.00 32.17           N
ATOM   2193  CA  ILE B  21      53.602  24.971 -10.814  1.00 31.94           C
ATOM   2194  C   ILE B  21      53.524  26.455 -10.447  1.00 31.94           C
ATOM   2195  O   ILE B  21      54.124  27.294 -11.118  1.00 32.04           O
ATOM   2196  CB  ILE B  21      52.247  24.437 -11.366  1.00 31.98           C
ATOM   2197  CG1 ILE B  21      52.463  23.112 -12.103  1.00 32.04           C
ATOM   2198  CD1 ILE B  21      51.503  22.019 -11.708  1.00 32.21           C
ATOM   2199  CG2 ILE B  21      51.582  25.450 -12.300  1.00 31.74           C
ATOM   2200  N   LYS B  22      52.787  26.775  -9.388  1.00 31.85           N
ATOM   2201  CA  LYS B  22      52.634  28.162  -8.961  1.00 31.71           C
ATOM   2202  C   LYS B  22      53.041  28.335  -7.506  1.00 31.60           C
ATOM   2203  O   LYS B  22      52.793  27.457  -6.682  1.00 31.69           O
ATOM   2204  CB  LYS B  22      51.191  28.630  -9.162  1.00 31.79           C
ATOM   2205  N   VAL B  23      53.676  29.464  -7.200  1.00 31.28           N
ATOM   2206  CA  VAL B  23      54.018  29.800  -5.822  1.00 31.08           C
ATOM   2207  C   VAL B  23      52.773  30.362  -5.149  1.00 30.96           C
ATOM   2208  O   VAL B  23      52.146  31.289  -5.668  1.00 31.13           O
ATOM   2209  CB  VAL B  23      55.188  30.826  -5.739  1.00 31.10           C
ATOM   2210  CG1 VAL B  23      55.499  31.199  -4.291  1.00 30.73           C
ATOM   2211  CG2 VAL B  23      56.439  30.284  -6.418  1.00 31.48           C
ATOM   2212  N   LEU B  24      52.403  29.789  -4.008  1.00 30.68           N
ATOM   2213  CA  LEU B  24      51.286  30.317  -3.230  1.00 30.58           C
ATOM   2214  C   LEU B  24      51.762  31.423  -2.294  1.00 30.48           C
ATOM   2215  O   LEU B  24      51.081  32.435  -2.119  1.00 30.46           O
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FIG. 4KK

```
ATOM   2216  CB  LEU B  24      50.579  29.206  -2.448  1.00 30.42           C
ATOM   2217  CG  LEU B  24      49.328  28.610  -3.104  1.00 30.39           C
ATOM   2218  CD1 LEU B  24      49.100  27.189  -2.620  1.00 30.63           C
ATOM   2219  CD2 LEU B  24      48.094  29.468  -2.837  1.00 30.36           C
ATOM   2220  N   GLY B  25      52.941  31.225  -1.708  1.00 30.43           N
ATOM   2221  CA  GLY B  25      53.526  32.188  -0.793  1.00 30.28           C
ATOM   2222  C   GLY B  25      54.471  31.553   0.209  1.00 30.30           C
ATOM   2223  O   GLY B  25      54.652  30.331   0.229  1.00 30.17           O
ATOM   2224  N   SER B  26      55.070  32.397   1.047  1.00 30.26           N
ATOM   2225  CA  SER B  26      56.030  31.959   2.055  1.00 30.20           C
ATOM   2226  C   SER B  26      55.515  32.225   3.468  1.00 30.14           C
ATOM   2227  O   SER B  26      54.572  32.992   3.660  1.00 30.35           O
ATOM   2228  CB  SER B  26      57.371  32.662   1.845  1.00 30.13           C
ATOM   2229  OG  SER B  26      57.783  32.574   0.494  1.00 30.57           O
ATOM   2230  N   GLY B  27      56.140  31.583   4.450  1.00 30.06           N
ATOM   2231  CA  GLY B  27      55.783  31.766   5.844  1.00 29.95           C
ATOM   2232  C   GLY B  27      56.990  31.765   6.762  1.00 29.94           C
ATOM   2233  O   GLY B  27      58.023  32.365   6.451  1.00 30.05           O
ATOM   2234  N   ALA B  28      56.853  31.088   7.897  1.00 29.79           N
ATOM   2235  CA  ALA B  28      57.906  31.024   8.904  1.00 29.69           C
ATOM   2236  C   ALA B  28      58.713  29.732   8.817  1.00 29.66           C
ATOM   2237  O   ALA B  28      59.796  29.638   9.390  1.00 29.72           O
ATOM   2238  CB  ALA B  28      57.314  31.187  10.300  1.00 29.53           C
ATOM   2239  N   PHE B  29      58.184  28.745   8.094  1.00 29.64           N
ATOM   2240  CA  PHE B  29      58.789  27.415   8.033  1.00 29.41           C
ATOM   2241  C   PHE B  29      59.009  26.908   6.611  1.00 29.33           C
ATOM   2242  O   PHE B  29      59.776  25.964   6.399  1.00 29.49           O
ATOM   2243  CB  PHE B  29      57.940  26.406   8.814  1.00 29.42           C
ATOM   2244  CG  PHE B  29      57.887  26.673  10.289  1.00 29.64           C
ATOM   2245  CD1 PHE B  29      58.971  26.366  11.104  1.00 29.76           C
ATOM   2246  CE1 PHE B  29      58.925  26.619  12.470  1.00 30.09           C
ATOM   2247  CZ  PHE B  29      57.784  27.184  13.034  1.00 29.98           C
ATOM   2248  CE2 PHE B  29      56.696  27.493  12.229  1.00 29.75           C
ATOM   2249  CD2 PHE B  29      56.752  27.237  10.863  1.00 29.79           C
ATOM   2250  N   GLY B  30      58.336  27.520   5.641  1.00 29.09           N
ATOM   2251  CA  GLY B  30      58.486  27.104   4.259  1.00 28.75           C
ATOM   2252  C   GLY B  30      57.729  27.901   3.218  1.00 28.55           C
ATOM   2253  O   GLY B  30      56.986  28.836   3.533  1.00 28.42           O
ATOM   2254  N   THR B  31      57.942  27.515   1.963  1.00 28.38           N
ATOM   2255  CA  THR B  31      57.261  28.101   0.818  1.00 28.05           C
ATOM   2256  C   THR B  31      56.234  27.102   0.302  1.00 28.03           C
ATOM   2257  O   THR B  31      56.569  25.958  -0.013  1.00 28.03           O
ATOM   2258  CB  THR B  31      58.281  28.454  -0.285  1.00 27.97           C
ATOM   2259  OG1 THR B  31      59.191  29.447   0.205  1.00 27.82           O
ATOM   2260  CG2 THR B  31      57.601  29.149  -1.460  1.00 27.96           C
ATOM   2261  N   VAL B  32      54.982  27.540   0.228  1.00 27.96           N
ATOM   2262  CA  VAL B  32      53.903  26.691  -0.264  1.00 27.86           C
ATOM   2263  C   VAL B  32      53.731  26.877  -1.768  1.00 27.85           C
ATOM   2264  O   VAL B  32      53.748  28.001  -2.277  1.00 28.03           O
ATOM   2265  CB  VAL B  32      52.575  26.939   0.495  1.00 27.79           C
ATOM   2266  CG1 VAL B  32      51.461  26.052  -0.042  1.00 27.78           C
ATOM   2267  CG2 VAL B  32      52.762  26.679   1.982  1.00 27.76           C
ATOM   2268  N   TYR B  33      53.583  25.758  -2.469  1.00 27.72           N
ATOM   2269  CA  TYR B  33      53.424  25.753  -3.912  1.00 27.67           C
ATOM   2270  C   TYR B  33      52.108  25.103  -4.302  1.00 27.56           C
ATOM   2271  O   TYR B  33      51.662  24.150  -3.664  1.00 27.55           O
ATOM   2272  CB  TYR B  33      54.566  24.975  -4.575  1.00 27.76           C
ATOM   2273  CG  TYR B  33      55.937  25.586  -4.409  1.00 28.13           C
ATOM   2274  CD1 TYR B  33      56.438  26.487  -5.349  1.00 28.14           C
ATOM   2275  CE1 TYR B  33      57.704  27.046  -5.203  1.00 28.57           C
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FIG. 4LL

```
ATOM   2276  CZ  TYR B  33      58.482  26.702  -4.107  1.00 28.87           C
ATOM   2277  OH  TYR B  33      59.733  27.254  -3.954  1.00 29.32           O
ATOM   2278  CE2 TYR B  33      58.008  25.806  -3.161  1.00 28.67           C
ATOM   2279  CD2 TYR B  33      56.742  25.252  -3.317  1.00 28.47           C
ATOM   2280  N   LYS B  34      51.490  25.636  -5.351  1.00 27.51           N
ATOM   2281  CA  LYS B  34      50.421  24.944  -6.053  1.00 27.50           C
ATOM   2282  C   LYS B  34      51.083  24.054  -7.089  1.00 27.38           C
ATOM   2283  O   LYS B  34      51.898  24.526  -7.888  1.00 27.32           O
ATOM   2284  CB  LYS B  34      49.486  25.942  -6.734  1.00 27.57           C
ATOM   2285  CG  LYS B  34      48.187  26.168  -5.998  1.00 27.81           C
ATOM   2286  CD  LYS B  34      47.135  26.770  -6.904  1.00 28.47           C
ATOM   2287  CE  LYS B  34      46.836  28.209  -6.521  1.00 28.61           C
ATOM   2288  NZ  LYS B  34      47.432  29.170  -7.494  1.00 28.86           N
ATOM   2289  N   GLY B  35      50.746  22.767  -7.067  1.00 27.38           N
ATOM   2290  CA  GLY B  35      51.364  21.805  -7.964  1.00 27.34           C
ATOM   2291  C   GLY B  35      50.546  20.565  -8.257  1.00 27.34           C
ATOM   2292  O   GLY B  35      49.432  20.406  -7.757  1.00 26.97           O
ATOM   2293  N   LEU B  36      51.116  19.685  -9.075  1.00 27.72           N
ATOM   2294  CA  LEU B  36      50.453  18.456  -9.500  1.00 28.11           C
ATOM   2295  C   LEU B  36      51.096  17.223  -8.882  1.00 28.41           C
ATOM   2296  O   LEU B  36      52.315  17.161  -8.727  1.00 28.37           O
ATOM   2297  CB  LEU B  36      50.482  18.332 -11.026  1.00 28.07           C
ATOM   2298  CG  LEU B  36      49.272  18.800 -11.843  1.00 28.21           C
ATOM   2299  CD1 LEU B  36      49.582  18.707 -13.327  1.00 28.16           C
ATOM   2300  CD2 LEU B  36      48.011  18.007 -11.516  1.00 28.23           C
ATOM   2301  N   TRP B  37      50.261  16.249  -8.533  1.00 28.91           N
ATOM   2302  CA  TRP B  37      50.717  14.964  -8.018  1.00 29.48           C
ATOM   2303  C   TRP B  37      50.344  13.868  -9.010  1.00 29.70           C
ATOM   2304  O   TRP B  37      49.168  13.680  -9.326  1.00 29.69           O
ATOM   2305  CB  TRP B  37      50.097  14.686  -6.642  1.00 29.68           C
ATOM   2306  CG  TRP B  37      50.548  13.401  -5.978  1.00 30.20           C
ATOM   2307  CD1 TRP B  37      51.660  12.658  -6.275  1.00 30.53           C
ATOM   2308  NE1 TRP B  37      51.731  11.558  -5.454  1.00 30.58           N
ATOM   2309  CE2 TRP B  37      50.663  11.572  -4.597  1.00 30.67           C
ATOM   2310  CD2 TRP B  37      49.896  12.720  -4.899  1.00 30.54           C
ATOM   2311  CE3 TRP B  37      48.735  12.962  -4.152  1.00 30.95           C
ATOM   2312  CZ3 TRP B  37      48.382  12.067  -3.146  1.00 31.27           C
ATOM   2313  CH2 TRP B  37      49.168  10.937  -2.874  1.00 31.31           C
ATOM   2314  CZ2 TRP B  37      50.308  10.673  -3.586  1.00 31.05           C
ATOM   2315  N   ILE B  38      51.356  13.158  -9.502  1.00 30.12           N
ATOM   2316  CA  ILE B  38      51.165  12.096 -10.486  1.00 30.54           C
ATOM   2317  C   ILE B  38      51.885  10.816 -10.062  1.00 30.68           C
ATOM   2318  O   ILE B  38      53.090  10.675 -10.283  1.00 30.85           O
ATOM   2319  CB  ILE B  38      51.641  12.553 -11.888  1.00 30.47           C
ATOM   2320  N   PRO B  39      51.145   9.888  -9.454  1.00 31.01           N
ATOM   2321  CA  PRO B  39      51.718   8.615  -8.994  1.00 31.14           C
ATOM   2322  C   PRO B  39      51.989   7.643 -10.144  1.00 31.39           C
ATOM   2323  O   PRO B  39      51.586   7.906 -11.282  1.00 31.62           O
ATOM   2324  CB  PRO B  39      50.629   8.058  -8.075  1.00 31.16           C
ATOM   2325  CG  PRO B  39      49.352   8.637  -8.602  1.00 31.20           C
ATOM   2326  CD  PRO B  39      49.701   9.986  -9.162  1.00 31.03           C
ATOM   2327  N   ILE B  46      46.081  15.307 -10.527  1.00 24.43           N
ATOM   2328  CA  ILE B  46      45.702  15.591  -9.143  1.00 24.50           C
ATOM   2329  C   ILE B  46      46.391  16.852  -8.602  1.00 24.43           C
ATOM   2330  O   ILE B  46      47.552  16.799  -8.192  1.00 24.34           O
ATOM   2331  CB  ILE B  46      45.997  14.375  -8.233  1.00 24.30           C
ATOM   2332  N   PRO B  47      45.680  17.982  -8.617  1.00 24.47           N
ATOM   2333  CA  PRO B  47      46.200  19.240  -8.061  1.00 24.46           C
ATOM   2334  C   PRO B  47      46.413  19.134  -6.554  1.00 24.35           C
ATOM   2335  O   PRO B  47      45.622  18.488  -5.863  1.00 24.56           O
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FIG. 4MM

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ATOM   2336  CB  PRO B  47      45.092  20.249  -8.379  1.00 24.56           C
ATOM   2337  CG  PRO B  47      44.313  19.618  -9.487  1.00 24.65           C
ATOM   2338  CD  PRO B  47      44.328  18.152  -9.181  1.00 24.51           C
ATOM   2339  N   VAL B  48      47.469  19.772  -6.056  1.00 24.13           N
ATOM   2340  CA  VAL B  48      47.947  19.531  -4.700  1.00 23.96           C
ATOM   2341  C   VAL B  48      48.742  20.722  -4.148  1.00 24.14           C
ATOM   2342  O   VAL B  48      49.158  21.606  -4.904  1.00 24.29           O
ATOM   2343  CB  VAL B  48      48.780  18.204  -4.661  1.00 23.97           C
ATOM   2344  CG1 VAL B  48      50.295  18.459  -4.708  1.00 23.50           C
ATOM   2345  CG2 VAL B  48      48.376  17.345  -3.481  1.00 23.89           C
ATOM   2346  N   ALA B  49      48.933  20.754  -2.831  1.00 24.09           N
ATOM   2347  CA  ALA B  49      49.784  21.761  -2.203  1.00 24.09           C
ATOM   2348  C   ALA B  49      51.132  21.155  -1.821  1.00 24,22           C
ATOM   2349  O   ALA B  49      51.187  20.081  -1.224  1.00 24.15           O
ATOM   2350  CB  ALA B  49      49.098  22.357  -0.982  1.00 23.99           C
ATOM   2351  N   ILE B  50      52.214  21.843  -2.180  1.00 24.48           N
ATOM   2352  CA  ILE B  50      53.566  21.409  -1.828  1.00 24.74           C
ATOM   2353  C   ILE B  50      54.239  22.459  -0.952  1.00 24.99           C
ATOM   2354  O   ILE B  50      54.338  23.620  -1.334  1.00 25.01           O
ATOM   2355  CB  ILE B  50      54.425  21.126  -3.094  1.00 24.73           C
ATOM   2356  CG1 ILE B  50      53.696  20.184  -4.056  1.00 24.79           C
ATOM   2357  CD1 ILE B  50      53.807  20.587  -5.505  1.00 24.50           C
ATOM   2358  CG2 ILE B  50      55.780  20.530  -2.712  1.00 24.47           C
ATOM   2359  N   LYS B  51      54.691  22.043   0.227  1.00 25.49           N
ATOM   2360  CA  LYS B  51      55.411  22.928   1.134  1.00 25.82           C
ATOM   2361  C   LYS B  51      56.863  22.481   1.271  1.00 26.19           C
ATOM   2362  O   LYS B  51      57.149  21.360   1.697  1.00 26.02           O
ATOM   2363  CB  LYS B  51      54.729  22.981   2.502  1.00 25.80           C
ATOM   2364  N   GLU B  52      57.773  23.373   0.896  1.00 26.64           N
ATOM   2365  CA  GLU B  52      59.199  23.096   0.940  1.00 27.12           C
ATOM   2366  C   GLU B  52      59.835  23.899   2.065  1.00 27.24           C
ATOM   2367  O   GLU B  52      59.854  25.134   2.023  1.00 27.28           O
ATOM   2368  CB  GLU B  52      59.836  23.448  -0.405  1.00 27.40           C
ATOM   2369  CG  GLU B  52      61.252  22.931  -0.593  1.00 28.38           C
ATOM   2370  CD  GLU B  52      61.769  23.156  -1.999  1.00 29.42           C
ATOM   2371  OE1 GLU B  52      61.627  24.287  -2.522  1.00 29.75           O
ATOM   2372  OE2 GLU B  52      62.317  22.197  -2.583  1.00 30.05           O
ATOM   2373  N   LEU B  53      60.348  23.191   3.069  1.00 27.29           N
ATOM   2374  CA  LEU B  53      60.956  23.824   4.238  1.00 27.37           C
ATOM   2375  C   LEU B  53      62.152  24.688   3.850  1.00 27.87           C
ATOM   2376  O   LEU B  53      62.920  24.335   2.952  1.00 28.04           O
ATOM   2377  CB  LEU B  53      61.373  22.773   5.274  1.00 27.04           C
ATOM   2378  CG  LEU B  53      60.352  21.766   5.832  1.00 26.54           C
ATOM   2379  CD1 LEU B  53      60.925  21.073   7.065  1.00 26.17           C
ATOM   2380  CD2 LEU B  53      58.997  22.395   6.161  1.00 25.66           C
ATOM   2381  N   ARG B  54      62.297  25.823   4.531  1.00 28.51           N
ATOM   2382  CA  ARG B  54      63.370  26.782   4.249  1.00 29.00           C
ATOM   2383  C   ARG B  54      64.755  26.212   4.539  1.00 28.95           C
ATOM   2384  O   ARG B  54      65.747  26.653   3.951  1.00 29.33           O
ATOM   2385  CB  ARG B  54      63.163  28.090   5.025  1.00 29.38           C
ATOM   2386  CG  ARG B  54      62.529  27.924   6.401  1.00 30.65           C
ATOM   2387  CD  ARG B  54      63.325  28.546   7.534  1.00 32.35           C
ATOM   2388  NE  ARG B  54      62.677  29.745   8.061  1.00 33.88           N
ATOM   2389  CZ  ARG B  54      62.675  30.103   9.342  1.00 34.80           C
ATOM   2390  NH1 ARG B  54      62.053  31.216   9.715  1.00 35.20           N
ATOM   2391  NH2 ARG B  54      63.282  29.352  10.255  1.00 35.03           N
ATOM   2392  N   GLU B  55      64.817  25.239   5.446  1.00 28.69           N
ATOM   2393  CA  GLU B  55      66.070  24.560   5.768  1.00 28.61           C
ATOM   2394  C   GLU B  55      66.053  23.114   5.279  1.00 28.60           C
ATOM   2395  O   GLU B  55      65.046  22.632   4.757  1.00 28.57           O
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FIG. 4NN

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ATOM   2396  CB  GLU B  55      66.336  24.604   7.274  1.00 28.56           C
ATOM   2397  N   LYS B  63      65.778  10.560   9.002  1.00 30.12           N
ATOM   2398  CA  LYS B  63      65.123   9.381   9.558  1.00 30.00           C
ATOM   2399  C   LYS B  63      63.989   9.762  10.509  1.00 30.00           C
ATOM   2400  O   LYS B  63      62.857   9.301  10.348  1.00 30.03           O
ATOM   2401  CB  LYS B  63      66.140   8.487  10.272  1.00 29.90           C
ATOM   2402  N   GLU B  64      64.302  10.604  11.493  1.00 30.01           N
ATOM   2403  CA  GLU B  64      63.332  11.037  12.500  1.00 29.98           C
ATOM   2404  C   GLU B  64      62.302  12.005  11.917  1.00 29.81           C
ATOM   2405  O   GLU B  64      61.177  12.096  12.414  1.00 29.67           O
ATOM   2406  CB  GLU B  64      64.044  11.672  13.698  1.00 30.05           C
ATOM   2407  N   ILE B  65      62.703  12.722  10.868  1.00 29.64           N
ATOM   2408  CA  ILE B  65      61.807  13.593  10.106  1.00 29.46           C
ATOM   2409  C   ILE B  65      60.683  12.774   9.462  1.00 29.27           C
ATOM   2410  O   ILE B  65      59.520  13.187   9.475  1.00 29.16           O
ATOM   2411  CB  ILE B  65      62.594  14.374   9.022  1.00 29.61           C
ATOM   2412  CG1 ILE B  65      63.901  14.934   9.592  1.00 29.86           C
ATOM   2413  CD1 ILE B  65      65.146  14.350   8.953  1.00 30.24           C
ATOM   2414  CG2 ILE B  65      61.747  15.503   8.440  1.00 29.75           C
ATOM   2415  N   LEU B  66      61.048  11.616   8.907  1.00 28.93           N
ATOM   2416  CA  LEU B  66      60.096  10.680   8.312  1.00 28.66           C
ATOM   2417  C   LEU B  66      59.178  10.072   9.371  1.00 28.51           C
ATOM   2418  O   LEU B  66      57.992   9.856   9.118  1.00 28.64           O
ATOM   2419  CB  LEU B  66      60.834   9.574   7.549  1.00 28.74           C
ATOM   2420  CG  LEU B  66      60.010   8.543   6.769  1.00 28.85           C
ATOM   2421  CD1 LEU B  66      60.105   8.787   5.274  1.00 29.23           C
ATOM   2422  CD2 LEU B  66      60.469   7.134   7.102  1.00 29.04           C
ATOM   2423  N   ASP B  67      59.730   9.803  10.553  1.00 28.24           N
ATOM   2424  CA  ASP B  67      58.951   9.261  11.665  1.00 27.91           C
ATOM   2425  C   ASP B  67      57.893  10.255  12.134  1.00 27.44           C
ATOM   2426  O   ASP B  67      56.780   9.862  12.489  1.00 27.47           O
ATOM   2427  CB  ASP B  67      59.861   8.860  12.826  1.00 28.21           C
ATOM   2428  CG  ASP B  67      60.162   7.372  12.846  1.00 29.13           C
ATOM   2429  OD1 ASP B  67      61.339   7.010  13.066  1.00 30.16           O
ATOM   2430  OD2 ASP B  67      59.295   6.488  12.658  1.00 29.78           O
ATOM   2431  N   GLU B  68      58.249  11.539  12.120  1.00 26.75           N
ATOM   2432  CA  GLU B  68      57.320  12.617  12.446  1.00 26.21           C
ATOM   2433  C   GLU B  68      56.264  12.790  11.355  1.00 25.93           C
ATOM   2434  O   GLU B  68      55.138  13.210  11.632  1.00 25.86           O
ATOM   2435  CB  GLU B  68      58.076  13.930  12.659  1.00 26.13           C
ATOM   2436  N   ALA B  69      56.634  12.464  10.119  1.00 25.37           N
ATOM   2437  CA  ALA B  69      55.713  12.540   8.988  1.00 24.87           C
ATOM   2438  C   ALA B  69      54.645  11.448   9.049  1.00 24.63           C
ATOM   2439  O   ALA B  69      53.526  11.644   8.566  1.00 24.51           O
ATOM   2440  CB  ALA B  69      56.472  12.470   7.678  1.00 24.81           C
ATOM   2441  N   TYR B  70      54.994  10.311   9.650  1.00 24.18           N
ATOM   2442  CA  TYR B  70      54.066   9.190   9.799  1.00 23.84           C
ATOM   2443  C   TYR B  70      52.915   9.508  10.753  1.00 23.49           C
ATOM   2444  O   TYR B  70      51.761   9.188  10.456  1.00 23.32           O
ATOM   2445  CB  TYR B  70      54.799   7.915  10.237  1.00 23.91           C
ATOM   2446  CG  TYR B  70      55.306   7.080   9.080  1.00 23.87           C
ATOM   2447  CD1 TYR B  70      54.422   6.410   8.234  1.00 23.97           C
ATOM   2448  CE1 TYR B  70      54.887   5.648   7.162  1.00 23.97           C
ATOM   2449  CZ  TYR B  70      56.250   5.551   6.935  1.00 23.96           C
ATOM   2450  OH  TYR B  70      56.721   4.799   5.884  1.00 24.29           O
ATOM   2451  CE2 TYR B  70      57.145   6.206   7.761  1.00 23.92           C
ATOM   2452  CD2 TYR B  70      56.671   6.966   8.826  1.00 24.06           C
ATOM   2453  N   VAL B  71      53.230  10.138  11.886  1.00 23.05           N
ATOM   2454  CA  VAL B  71      52.200  10.587  12.827  1.00 22.77           C
ATOM   2455  C   VAL B  71      51.390  11.739  12.224  1.00 22.40           C
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FIG. 4OO

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ATOM   2456  O   VAL B  71      50.174  11.822  12.422  1.00 22.62           O
ATOM   2457  CB  VAL B  71      52.772  10.931  14.250  1.00 22.74           C
ATOM   2458  CG1 VAL B  71      53.773  12.070  14.207  1.00 23.13           C
ATOM   2459  CG2 VAL B  71      51.651  11.249  15.235  1.00 22.86           C
ATOM   2460  N   MET B  72      52.069  12.600  11.467  1.00 21.88           N
ATOM   2461  CA  MET B  72      51.422  13.685  10.736  1.00 21.55           C
ATOM   2462  C   MET B  72      50.433  13.158   9.699  1.00 21.36           C
ATOM   2463  O   MET B  72      49.385  13.762   9.472  1.00 21.11           O
ATOM   2464  CB  MET B  72      52.467  14.565  10.052  1.00 21.63           C
ATOM   2465  CG  MET B  72      52.969  15.709  10.910  1.00 21.62           C
ATOM   2466  SD  MET B  72      54.562  16.324  10.351  1.00 22.13           S
ATOM   2467  CE  MET B  72      54.058  17.466   9.116  1.00 21.51           C
ATOM   2468  N   ALA B  73      50.774  12.026   9.083  1.00 21.09           N
ATOM   2469  CA  ALA B  73      49.915  11.378   8.095  1.00 20.63           C
ATOM   2470  C   ALA B  73      48.847  10.486   8.722  1.00 20.41           C
ATOM   2471  O   ALA B  73      47.914  10.059   8.038  1.00 20.42           O
ATOM   2472  CB  ALA B  73      50.749  10.582   7.123  1.00 20.70           C
ATOM   2473  N   SER B  74      48.989  10.196  10.014  1.00 20.08           N
ATOM   2474  CA  SER B  74      48.030   9.345  10.716  1.00 19.66           C
ATOM   2475  C   SER B  74      46.854  10.157  11.247  1.00 19.50           C
ATOM   2476  O   SER B  74      45.828   9.593  11.645  1.00 19.48           O
ATOM   2477  CB  SER B  74      48.709   8.562  11.849  1.00 19.56           C
ATOM   2478  OG  SER B  74      48.996   9.388  12.964  1.00 19.37           O
ATOM   2479  N   VAL B  75      47.017  11.480  11.248  1.00 19.07           N
ATOM   2480  CA  VAL B  75      45.996  12.404  11.735  1.00 18.77           C
ATOM   2481  C   VAL B  75      44.693  12.257  10.951  1.00 18.64           C
ATOM   2482  O   VAL B  75      44.611  12.595   9.770  1.00 18.83           O
ATOM   2483  CB  VAL B  75      46.501  13.872  11.719  1.00 18.82           C
ATOM   2484  CG1 VAL B  75      45.350  14.854  11.885  1.00 18.76           C
ATOM   2485  CG2 VAL B  75      47.535  14.084  12.815  1.00 18.78           C
ATOM   2486  N   ASP B  76      43.682  11.729  11.628  1.00 18.53           N
ATOM   2487  CA  ASP B  76      42.377  11.516  11.024  1.00 18.29           C
ATOM   2488  C   ASP B  76      41.298  12.265  11.807  1.00 17.84           C
ATOM   2489  O   ASP B  76      40.775  11.763  12.805  1.00 17.73           O
ATOM   2490  CB  ASP B  76      42.073  10.018  10.946  1.00 18.50           C
ATOM   2491  CG  ASP B  76      40.947   9.698   9.987  1.00 19.04           C
ATOM   2492  OD1 ASP B  76      40.583  10.569   9.167  1.00 19.61           O
ATOM   2493  OD2 ASP B  76      40.364   8.593   9.981  1.00 19.97           O
ATOM   2494  N   ASN B  77      40.993  13.477  11.347  1.00 17.35           N
ATOM   2495  CA  ASN B  77      39.979  14.337  11.952  1.00 17.09           C
ATOM   2496  C   ASN B  77      39.427  15.327  10.924  1.00 16.97           C
ATOM   2497  O   ASN B  77      40.200  15.938  10.183  1.00 16.85           O
ATOM   2498  CB  ASN B  77      40.554  15.092  13.157  1.00 17.00           C
ATOM   2499  CG  ASN B  77      39.495  15.860  13.929  1.00 16.91           C
ATOM   2500  OD1 ASN B  77      39.183  17.007  13.609  1.00 16.63           O
ATOM   2501  ND2 ASN B  77      38.933  15.226  14.951  1.00 17.35           N
ATOM   2502  N   PRO B  78      38.100  15.482  10.880  1.00 16.91           N
ATOM   2503  CA  PRO B  78      37.446  16.410   9.941  1.00 16.93           C
ATOM   2504  C   PRO B  78      37.894  17.870  10.073  1.00 17.03           C
ATOM   2505  O   PRO B  78      37.616  18.670   9.179  1.00 16.85           O
ATOM   2506  CB  PRO B  78      35.960  16.292  10.308  1.00 16.95           C
ATOM   2507  CG  PRO B  78      35.830  14.978  10.994  1.00 16.68           C
ATOM   2508  CD  PRO B  78      37.118  14.759  11.710  1.00 16.84           C
ATOM   2509  N   HIS B  79      38.576  18.208  11.164  1.00 17.24           N
ATOM   2510  CA  HIS B  79      38.994  19.588  11.399  1.00 17.45           C
ATOM   2511  C   HIS B  79      40.508  19.772  11.531  1.00 17.57           C
ATOM   2512  O   HIS B  79      40.973  20.834  11.949  1.00 17.58           O
ATOM   2513  CB  HIS B  79      38.246  20.172  12.602  1.00 17.43           C
ATOM   2514  CG  HIS B  79      36.758  20.152  12.444  1.00 17.41           C
ATOM   2515  ND1 HIS B  79      36.112  20.784  11.404  1.00 17.41           N
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FIG. 4PP

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ATOM   2516  CE1 HIS B  79      34.811  20.587  11.511  1.00 17.51           C
ATOM   2517  NE2 HIS B  79      34.589  19.849  12.583  1.00 17.39           N
ATOM   2518  CD2 HIS B  79      35.791  19.559  13.182  1.00 17.34           C
ATOM   2519  N   VAL B  80      41.268  18.736  11.175  1.00 17.71           N
ATOM   2520  CA  VAL B  80      42.720  18.848  11.033  1.00 18.13           C
ATOM   2521  C   VAL B  80      43.138  18.311   9.665  1.00 18.46           C
ATOM   2522  O   VAL B  80      42.771  17.195   9.294  1.00 18.65           O
ATOM   2523  CB  VAL B  80      43.510  18.100  12.148  1.00 18.16           C
ATOM   2524  CG1 VAL B  80      44.978  18.517  12.134  1.00 18.02           C
ATOM   2525  CG2 VAL B  80      42.911  18.343  13.528  1.00 17.79           C
ATOM   2526  N   CYS B  81      43.893  19.114   8.920  1.00 18.84           N
ATOM   2527  CA  CYS B  81      44.410  18.706   7.614  1.00 19.24           C
ATOM   2528  C   CYS B  81      45.411  17.572   7.772  1.00 19.26           C
ATOM   2529  O   CYS B  81      46.147  17.526   8.749  1.00 19.30           O
ATOM   2530  CB  CYS B  81      45.066  19.884   6.898  1.00 19.33           C
ATOM   2531  SG  CYS B  81      43.932  21.220   6.469  1.00 19.69           S
ATOM   2532  N   ARG B  82      45.424  16.659   6.808  1.00 19.54           N
ATOM   2533  CA  ARG B  82      46.262  15.467   6.867  1.00 19.86           C
ATOM   2534  C   ARG B  82      47.445  15.591   5.912  1.00 20.02           C
ATOM   2535  O   ARG B  82      47.330  16.198   4.845  1.00 20.28           O
ATOM   2536  CB  ARG B  82      45.421  14.235   6.511  1.00 19.91           C
ATOM   2537  CG  ARG B  82      46.039  12.888   6.854  1.00 20.11           C
ATOM   2538  CD  ARG B  82      45.336  11.707   6.184  1.00 20.60           C
ATOM   2539  NE  ARG B  82      46.261  10.623   5.854  1.00 20.98           N
ATOM   2540  CZ  ARG B  82      46.402  10.082   4.647  1.00 21.13           C
ATOM   2541  NH1 ARG B  82      45.682  10.511   3.620  1.00 21.34           N
ATOM   2542  NH2 ARG B  82      47.273   9.103   4.464  1.00 21.49           N
ATOM   2543  N   LEU B  83      48.583  15.026   6.306  1.00 20.21           N
ATOM   2544  CA  LEU B  83      49.722  14.902   5.404  1.00 20.33           C
ATOM   2545  C   LEU B  83      49.494  13.715   4.478  1.00 20.42           C
ATOM   2546  O   LEU B  83      49.357  12.577   4.935  1.00 20.56           O
ATOM   2547  CB  LEU B  83      51.035  14.741   6.179  1.00 20.20           C
ATOM   2548  CG  LEU B  83      52.332  14.813   5.359  1.00 20.36           C
ATOM   2549  CD1 LEU B  83      52.515  16.180   4.702  1.00 20.37           C
ATOM   2550  CD2 LEU B  83      53.536  14.473   6.219  1.00 20.49           C
ATOM   2551  N   LEU B  84      49.434  13.991   3.179  1.00 20.41           N
ATOM   2552  CA  LEU B  84      49.234  12.946   2.182  1.00 20.44           C
ATOM   2553  C   LEU B  84      50.548  12.244   1.851  1.00 20.54           C
ATOM   2554  O   LEU B  84      50.575  11.024   1.682  1.00 20.69           O
ATOM   2555  CB  LEU B  84      48.587  13.507   0.908  1.00 20.45           C
ATOM   2556  CG  LEU B  84      47.294  14.333   0.997  1.00 20.58           C
ATOM   2557  CD1 LEU B  84      46.972  14.930  -0.360  1.00 20.93           C
ATOM   2558  CD2 LEU B  84      46.108  13.520   1.511  1.00 20.23           C
ATOM   2559  N   GLY B  85      51.633  13.013   1.766  1.00 20.51           N
ATOM   2560  CA  GLY B  85      52.925  12.463   1.398  1.00 20.68           C
ATOM   2561  C   GLY B  85      54.140  13.314   1.727  1.00 20.81           C
ATOM   2562  O   GLY B  85      54.017  14.456   2.175  1.00 20.72           O
ATOM   2563  N   ILE B  86      55.319  12.741   1.493  1.00 20.93           N
ATOM   2564  CA  ILE B  86      56.593  13.412   1.751  1.00 21.14           C
ATOM   2565  C   ILE B  86      57.639  13.056   0.687  1.00 21.56           C
ATOM   2566  O   ILE B  86      57.555  12.007   0.044  1.00 21.49           O
ATOM   2567  CB  ILE B  86      57.107  13.090   3.196  1.00 21.03           C
ATOM   2568  CG1 ILE B  86      58.210  14.068   3.612  1.00 20.91           C
ATOM   2569  CD1 ILE B  86      58.426  14.175   5.105  1.00 21.16           C
ATOM   2570  CG2 ILE B  86      57.568  11.624   3.322  1.00 20.69           C
ATOM   2571  N   CYS B  87      58.606  13.951   0.494  1.00 22.26           N
ATOM   2572  CA  CYS B  87      59.760  13.684  -0.360  1.00 22.87           C
ATOM   2573  C   CYS B  87      61.014  14.298   0.248  1.00 23.09           C
ATOM   2574  O   CYS B  87      61.115  15.519   0.387  1.00 23.42           O
ATOM   2575  CB  CYS B  87      59.536  14.221  -1.772  1.00 22.92           C
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FIG. 4QQ

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ATOM   2576  SG  CYS B  87      60.881  13.836  -2.922  1.00 24.10           S
ATOM   2577  N   LEU B  88      61.964  13.440   0.607  1.00 23.42           N
ATOM   2578  CA  LEU B  88      63.201  13.871   1.254  1.00 23.82           C
ATOM   2579  C   LEU B  88      64.388  13.802   0.298  1.00 23.93           C
ATOM   2580  O   LEU B  88      64.498  12.869  -0.498  1.00 24.28           O
ATOM   2581  CB  LEU B  88      63.476  13.022   2.498  1.00 23.75           C
ATOM   2582  CG  LEU B  88      62.455  13.123   3.631  1.00 23.54           C
ATOM   2583  CD1 LEU B  88      62.037  11.736   4.082  1.00 23.49           C
ATOM   2584  CD2 LEU B  88      63.018  13.923   4.794  1.00 23.51           C
ATOM   2585  N   VAL B  92      63.403  18.650   2.176  1.00 22.16           N
ATOM   2586  CA  VAL B  92      62.142  18.200   2.760  1.00 22.16           C
ATOM   2587  C   VAL B  92      60.972  18.893   2.068  1.00 21.94           C
ATOM   2588  O   VAL B  92      60.873  20.122   2.074  1.00 21.95           O
ATOM   2589  CB  VAL B  92      62.081  18.453   4.293  1.00 22.29           C
ATOM   2590  CG1 VAL B  92      61.048  17.549   4.952  1.00 22.26           C
ATOM   2591  CG2 VAL B  92      63.447  18.242   4.934  1.00 22.88           C
ATOM   2592  N   GLN B  93      60.096  18.093   1.464  1.00 21.75           N
ATOM   2593  CA  GLN B  93      58.944  18.608   0.731  1.00 21.48           C
ATOM   2594  C   GLN B  93      57.666  17.910   1.178  1.00 21.26           C
ATOM   2595  O   GLN B  93      57.556  16.684   1.104  1.00 21.27           O
ATOM   2596  CB  GLN B  93      59.149  18.446  -0.778  1.00 21.61           C
ATOM   2597  CG  GLN B  93      60.103  19.464  -1.384  1.00 21.92           C
ATOM   2598  CD  GLN B  93      60.099  19.444  -2.897  1.00 22.34           C
ATOM   2599  OE1 GLN B  93      59.216  20.029  -3.528  1.00 22.32           O
ATOM   2600  NE2 GLN B  93      61.085  18.772  -3.485  1.00 22.27           N
ATOM   2601  N   LEU B  94      56.707  18.702   1.646  1.00 21.02           N
ATOM   2602  CA  LEU B  94      55.459  18.174   2.189  1.00 20.82           C
ATOM   2603  C   LEU B  94      54.289  18.444   1.251  1.00 20.71           C
ATOM   2604  O   LEU B  94      54.091  19.571   0.797  1.00 20.41           O
ATOM   2605  CB  LEU B  94      55.180  18.754   3.579  1.00 20.74           C
ATOM   2606  CG  LEU B  94      56.273  18.565   4.637  1.00 20.89           C
ATOM   2607  CD1 LEU B  94      56.307  19.752   5.579  1.00 20.79           C
ATOM   2608  CD2 LEU B  94      56.098  17.262   5.407  1.00 20.65           C
ATOM   2609  N   ILE B  95      53.525  17.395   0.966  1.00 20.61           N
ATOM   2610  CA  ILE B  95      52.394  17.482   0.050  1.00 20.57           C
ATOM   2611  C   ILE B  95      51.074  17.203   0.769  1.00 20.45           C
ATOM   2612  O   ILE B  95      50.903  16.161   1.408  1.00 20.36           O
ATOM   2613  CB  ILE B  95      52.604  16.568  -1.202  1.00 20.61           C
ATOM   2614  CG1 ILE B  95      51.279  16.005  -1.725  1.00 20.59           C
ATOM   2615  CD1 ILE B  95      51.385  15.339  -3.074  1.00 21.15           C
ATOM   2616  CG2 ILE B  95      53.597  15.457  -0.907  1.00 20.84           C
ATOM   2617  N   THR B  96      50.158  18.163   0.671  1.00 20.38           N
ATOM   2618  CA  THR B  96      48.836  18.063   1.283  1.00 20.31           C
ATOM   2619  C   THR B  96      47.754  18.421   0.270  1.00 20.16           C
ATOM   2620  O   THR B  96      48.052  18.866  -0.839  1.00 19.97           O
ATOM   2621  CB  THR B  96      48.724  18.993   2.517  1.00 20.47           C
ATOM   2622  OG1 THR B  96      49.302  20.272   2.219  1.00 20.71           O
ATOM   2623  CG2 THR B  96      49.565  18.470   3.682  1.00 20.47           C
ATOM   2624  N   GLN B  97      46.498  18.222   0.658  1.00 20.23           N
ATOM   2625  CA  GLN B  97      45.363  18.599  -0.174  1.00 20.15           C
ATOM   2626  C   GLN B  97      45.330  20.107  -0.409  1.00 19.95           C
ATOM   2627  O   GLN B  97      45.513  20.902   0.519  1.00 19.89           O
ATOM   2628  CB  GLN B  97      44.054  18.139   0.464  1.00 20.26           C
ATOM   2629  CG  GLN B  97      42.886  18.031  -0.513  1.00 20.90           C
ATOM   2630  CD  GLN B  97      41.549  17.837   0.182  1.00 21.44           C
ATOM   2631  OE1 GLN B  97      41.498  17.491   1.363  1.00 21.97           O
ATOM   2632  NE2 GLN B  97      40.464  18.059  -0.550  1.00 21.49           N
ATOM   2633  N   LEU B  98      45.104  20.484  -1.661  1.00 19.76           N
ATOM   2634  CA  LEU B  98      44.974  21.882  -2.038  1.00 19.64           C
ATOM   2635  C   LEU B  98      43.578  22.392  -1.695  1.00 19.59           C
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FIG. 4RR

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ATOM   2636  O   LEU B  98      42.576  21.739  -1.997  1.00 19.42           O
ATOM   2637  CB  LEU B  98      45.263  22.058  -3.531  1.00 19.59           C
ATOM   2638  CG  LEU B  98      45.305  23.465  -4.128  1.00 19.53           C
ATOM   2639  CD1 LEU B  98      46.346  24.340  -3.444  1.00 19.49           C
ATOM   2640  CD2 LEU B  98      45.586  23.362  -5.615  1.00 20.14           C
ATOM   2641  N   MET B  99      43.527  23.555  -1.052  1.00 19.48           N
ATOM   2642  CA  MET B  99      42.266  24.182  -0.682  1.00 19.59           C
ATOM   2643  C   MET B  99      42.120  25.515  -1.422  1.00 19.36           C
ATOM   2644  O   MET B  99      42.769  26.504  -1.068  1.00 19.21           O
ATOM   2645  CB  MET B  99      42.170  24.369   0.840  1.00 19.83           C
ATOM   2646  CG  MET B  99      42.422  23.094   1.647  1.00 20.31           C
ATOM   2647  SD  MET B  99      40.915  22.226   2.130  1.00 21.60           S
ATOM   2648  CE  MET B  99      41.579  20.613   2.522  1.00 22.18           C
ATOM   2649  N   PRO B 100      41.279  25.529  -2.458  1.00 19.09           N
ATOM   2650  CA  PRO B 100      41.118  26.701  -3.328  1.00 18.91           C
ATOM   2651  C   PRO B 100      40.550  27.939  -2.636  1.00 18.85           C
ATOM   2652  O   PRO B 100      40.681  29.030  -3.188  1.00 18.91           O
ATOM   2653  CB  PRO B 100      40.135  26.207  -4.394  1.00 18.90           C
ATOM   2654  CG  PRO B 100      39.400  25.101  -3.742  1.00 18.85           C
ATOM   2655  CD  PRO B 100      40.420  24.410  -2.888  1.00 19.12           C
ATOM   2656  N   PHE B 101      39.943  27.779  -1.462  1.00 18.69           N
ATOM   2657  CA  PHE B 101      39.309  28.902  -0.769  1.00 18.46           C
ATOM   2658  C   PHE B 101      40.204  29.585   0.273  1.00 18.39           C
ATOM   2659  O   PHE B 101      39.830  30.615   0.838  1.00 18.52           O
ATOM   2660  CB  PHE B 101      37.963  28.478  -0.169  1.00 18.51           C
ATOM   2661  CG  PHE B 101      37.016  27.882  -1.173  1.00 18.48           C
ATOM   2662  CD1 PHE B 101      36.847  28.467  -2.430  1.00 18.67           C
ATOM   2663  CE1 PHE B 101      35.979  27.912  -3.365  1.00 18.71           C
ATOM   2664  CZ  PHE B 101      35.270  26.760  -3.049  1.00 18.60           C
ATOM   2665  CE2 PHE B 101      35.431  26.169  -1.801  1.00 18.57           C
ATOM   2666  CD2 PHE B 101      36.301  26.731  -0.871  1.00 18.34           C
ATOM   2667  N   GLY B 102      41.379  29.008   0.517  1.00 18.15           N
ATOM   2668  CA  GLY B 102      42.400  29.636   1.338  1.00 17.73           C
ATOM   2669  C   GLY B 102      42.191  29.539   2.834  1.00 17.54           C
ATOM   2670  O   GLY B 102      41.487  28.649   3.318  1.00 17.50           O
ATOM   2671  N   CYS B 103      42.813  30.464   3.563  1.00 17.35           N
ATOM   2672  CA  CYS B 103      42.757  30.482   5.025  1.00 17.23           C
ATOM   2673  C   CYS B 103      41.559  31.265   5.561  1.00 17.28           C
ATOM   2674  O   CYS B 103      40.886  31.978   4.814  1.00 17.12           O
ATOM   2675  CB  CYS B 103      44.072  31.015   5.616  1.00 17.32           C
ATOM   2676  SG  CYS B 103      44.527  32.701   5.135  1.00 16.78           S
ATOM   2677  N   LEU B 104      41.302  31.121   6.860  1.00 17.44           N
ATOM   2678  CA  LEU B 104      40.159  31.757   7.514  1.00 17.62           C
ATOM   2679  C   LEU B 104      40.385  33.242   7.813  1.00 17.78           C
ATOM   2680  O   LEU B 104      39.432  34.021   7.834  1.00 17.86           O
ATOM   2681  CB  LEU B 104      39.785  31.000   8.795  1.00 17.54           C
ATOM   2682  CG  LEU B 104      38.447  31.275   9.495  1.00 17.46           C
ATOM   2683  CD1 LEU B 104      37.259  31.217   8.536  1.00 17.14           C
ATOM   2684  CD2 LEU B 104      38.257  30.298  10.651  1.00 17.22           C
ATOM   2685  N   LEU B 105      41.641  33.621   8.048  1.00 17.91           N
ATOM   2686  CA  LEU B 105      42.006  35.017   8.290  1.00 18.02           C
ATOM   2687  C   LEU B 105      41.674  35.917   7.092  1.00 18.22           C
ATOM   2688  O   LEU B 105      41.106  36.995   7.265  1.00 18.43           O
ATOM   2689  CB  LEU B 105      43.491  35.135   8.662  1.00 17.98           C
ATOM   2690  CG  LEU B 105      44.044  36.524   9.002  1.00 17.89           C
ATOM   2691  CD1 LEU B 105      43.593  36.980  10.387  1.00 18.20           C
ATOM   2692  CD2 LEU B 105      45.560  36.542   8.899  1.00 17.28           C
ATOM   2693  N   ASP B 106      42.027  35.477   5.885  1.00 18.14           N
ATOM   2694  CA  ASP B 106      41.687  36.217   4.673  1.00 18.08           C
ATOM   2695  C   ASP B 106      40.173  36.213   4.431  1.00 18.19           C
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FIG. 4SS

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ATOM   2696  O   ASP B 106      39.610  37.213   3.982  1.00 18.20           O
ATOM   2697  CB  ASP B 106      42.437  35.661   3.457  1.00 18.06           C
ATOM   2698  CG  ASP B 106      43.957  35.828   3.565  1.00 18.47           C
ATOM   2699  OD1 ASP B 106      44.442  36.529   4.481  1.00 18.85           O
ATOM   2700  OD2 ASP B 106      44.754  35.285   2.773  1.00 18.03           O
ATOM   2701  N   TYR B 107      39.521  35.095   4.750  1.00 18.27           N
ATOM   2702  CA  TYR B 107      38.073  34.971   4.586  1.00 18.25           C
ATOM   2703  C   TYR B 107      37.295  35.953   5.473  1.00 18.32           C
ATOM   2704  O   TYR B 107      36.343  36.584   5.005  1.00 18.20           O
ATOM   2705  CB  TYR B 107      37.601  33.528   4.822  1.00 18.06           C
ATOM   2706  CG  TYR B 107      36.121  33.329   4.554  1.00 18.06           C
ATOM   2707  CD1 TYR B 107      35.656  33.042   3.271  1.00 17.84           C
ATOM   2708  CE1 TYR B 107      34.294  32.874   3.022  1.00 17.97           C
ATOM   2709  CZ  TYR B 107      33.385  32.995   4.066  1.00 17.63           C
ATOM   2710  OH  TYR B 107      32.038  32.829   3.831  1.00 17.31           O
ATOM   2711  CE2 TYR B 107      33.824  33.282   5.346  1.00 17.32           C
ATOM   2712  CD2 TYR B 107      35.183  33.447   5.584  1.00 17.82           C
ATOM   2713  N   VAL B 108      37.699  36.078   6.739  1.00 18.40           N
ATOM   2714  CA  VAL B 108      37.060  37.025   7.661  1.00 18.57           C
ATOM   2715  C   VAL B 108      37.369  38.479   7.306  1.00 18.67           C
ATOM   2716  O   VAL B 108      36.564  39.369   7.571  1.00 18.65           O
ATOM   2717  CB  VAL B 108      37.368  36.744   9.173  1.00 18.53           C
ATOM   2718  CG1 VAL B 108      36.831  35.381   9.600  1.00 18.69           C
ATOM   2719  CG2 VAL B 108      38.852  36.874   9.494  1.00 18.02           C
ATOM   2720  N   ARG B 109      38.534  38.703   6.705  1.00 18.99           N
ATOM   2721  CA  ARG B 109      38.936  40.024   6.241  1.00 19.46           C
ATOM   2722  C   ARG B 109      38.146  40.438   4.999  1.00 20.04           C
ATOM   2723  O   ARG B 109      37.858  41.618   4.804  1.00 20.13           O
ATOM   2724  CB  ARG B 109      40.435  40.040   5.940  1.00 19.30           C
ATOM   2725  CG  ARG B 109      41.311  40.248   7.162  1.00 18.84           C
ATOM   2726  CD  ARG B 109      42.798  40.238   6.866  1.00 18.38           C
ATOM   2727  NE  ARG B 109      43.594  40.289   8.090  1.00 18.34           N
ATOM   2728  CZ  ARG B 109      44.919  40.184   8.140  1.00 18.12           C
ATOM   2729  NH1 ARG B 109      45.631  40.019   7.030  1.00 17.70           N
ATOM   2730  NH2 ARG B 109      45.536  40.243   9.312  1.00 17.84           N
ATOM   2731  N   GLU B 110      37.794  39.458   4.171  1.00 20.87           N
ATOM   2732  CA  GLU B 110      37.071  39.709   2.928  1.00 21.60           C
ATOM   2733  C   GLU B 110      35.569  39.876   3.145  1.00 22.25           C
ATOM   2734  O   GLU B 110      34.916  40.624   2.417  1.00 22.54           O
ATOM   2735  CB  GLU B 110      37.334  38.589   1.921  1.00 21.52           C
ATOM   2736  N   HIS B 111      35.027  39.183   4.145  1.00 22.82           N
ATOM   2737  CA  HIS B 111      33.587  39.193   4.396  1.00 23.38           C
ATOM   2738  C   HIS B 111      33.210  39.779   5.761  1.00 23.75           C
ATOM   2739  O   HIS B 111      32.297  39.284   6.425  1.00 24.02           O
ATOM   2740  CB  HIS B 111      33.013  37.783   4.237  1.00 23.42           C
ATOM   2741  CG  HIS B 111      33.257  37.181   2.890  1.00 23.81           C
ATOM   2742  ND1 HIS B 111      34.409  36.490   2.584  1.00 24.33           N
ATOM   2743  CE1 HIS B 111      34.353  36.079   1.330  1.00 24.04           C
ATOM   2744  NE2 HIS B 111      33.204  36.475   0.812  1.00 23.96           N
ATOM   2745  CD2 HIS B 111      32.501  37.168   1.767  1.00 24.20           C
ATOM   2746  N   LYS B 112      33.902  40.846   6.161  1.00 24.06           N
ATOM   2747  CA  LYS B 112      33.662  41.512   7.443  1.00 24.23           C
ATOM   2748  C   LYS B 112      32.180  41.805   7.688  1.00 24.53           C
ATOM   2749  O   LYS B 112      31.649  41.498   8.760  1.00 24.80           O
ATOM   2750  CB  LYS B 112      34.458  42.818   7.534  1.00 24.18           C
ATOM   2751  CG  LYS B 112      35.961  42.643   7.656  1.00 24.18           C
ATOM   2752  N   ASP B 113      31.519  42.386   6.688  1.00 24.57           N
ATOM   2753  CA  ASP B 113      30.127  42.813   6.826  1.00 24.85           C
ATOM   2754  C   ASP B 113      29.096  41.740   6.472  1.00 24.82           C
ATOM   2755  O   ASP B 113      27.902  42.034   6.378  1.00 25.13           O
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FIG. 4TT

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ATOM   2756  N   ASN B 114      29.552  40.503   6.294  1.00 24.62           N
ATOM   2757  CA  ASN B 114      28.686  39.418   5.836  1.00 24.36           C
ATOM   2758  C   ASN B 114      28.683  38.182   6.739  1.00 24.12           C
ATOM   2759  O   ASN B 114      27.770  37.358   6.668  1.00 24.02           O
ATOM   2760  CB  ASN B 114      29.058  39.021   4.407  1.00 24.60           C
ATOM   2761  N   ILE B 115      29.702  38.056   7.584  1.00 23.83           N
ATOM   2762  CA  ILE B 115      29.812  36.907   8.477  1.00 23.51           C
ATOM   2763  C   ILE B 115      28.903  37.056   9.700  1.00 23.34           C
ATOM   2764  O   ILE B 115      28.963  38.059  10.416  1.00 23.07           O
ATOM   2765  CB  ILE B 115      31.288  36.659   8.882  1.00 23.39           C
ATOM   2766  CG1 ILE B 115      32.126  36.332   7.643  1.00 23.15           C
ATOM   2767  CD1 ILE B 115      33.604  36.605   7.801  1.00 23.01           C
ATOM   2768  CG2 ILE B 115      31.388  35.514   9.890  1.00 23.54           C
ATOM   2769  N   GLY B 116      28.056  36.051   9.915  1.00 23.22           N
ATOM   2770  CA  GLY B 116      27.140  36.032  11.042  1.00 23.09           C
ATOM   2771  C   GLY B 116      27.760  35.433  12.290  1.00 23.12           C
ATOM   2772  O   GLY B 116      28.814  34.790  12.225  1.00 23.04           O
ATOM   2773  N   SER B 117      27.098  35.646  13.426  1.00 22.96           N
ATOM   2774  CA  SER B 117      27.555  35.137  14.720  1.00 22.87           C
ATOM   2775  C   SER B 117      27.519  33.612  14.810  1.00 22.68           C
ATOM   2776  O   SER B 117      28.327  33.014  15.523  1.00 22.86           O
ATOM   2777  CB  SER B 117      26.744  35.750  15.866  1.00 22.90           C
ATOM   2778  OG  SER B 117      25.435  36.097  15.447  1.00 23.42           O
ATOM   2779  N   GLN B 118      26.586  32.989  14.092  1.00 22.42           N
ATOM   2780  CA  GLN B 118      26.490  31.530  14.052  1.00 22.18           C
ATOM   2781  C   GLN B 118      27.730  30.904  13.409  1.00 21.88           C
ATOM   2782  O   GLN B 118      28.264  29.917  13.919  1.00 21.95           O
ATOM   2783  CB  GLN B 118      25.207  31.078  13.338  1.00 22.27           C
ATOM   2784  CG  GLN B 118      24.991  29.558  13.278  1.00 22.98           C
ATOM   2785  CD  GLN B 118      24.809  28.919  14.649  1.00 23.82           C
ATOM   2786  OE1 GLN B 118      25.787  28.617  15.335  1.00 24.34           O
ATOM   2787  NE2 GLN B 118      23.559  28.705  15.044  1.00 24.11           N
ATOM   2788  N   TYR B 119      28.183  31.485  12.300  1.00 21.29           N
ATOM   2789  CA  TYR B 119      29.392  31.030  11.621  1.00 20.92           C
ATOM   2790  C   TYR B 119      30.635  31.274  12.472  1.00 20.67           C
ATOM   2791  O   TYR B 119      31.511  30.414  12.562  1.00 20.72           O
ATOM   2792  CB  TYR B 119      29.544  31.728  10.267  1.00 21.08           C
ATOM   2793  CG  TYR B 119      28.788  31.067   9.134  1.00 21.26           C
ATOM   2794  CD1 TYR B 119      29.408  30.127   8.315  1.00 21.56           C
ATOM   2795  CE1 TYR B 119      28.720  29.517   7.268  1.00 21.68           C
ATOM   2796  CZ  TYR B 119      27.397  29.851   7.033  1.00 21.81           C
ATOM   2797  OH  TYR B 119      26.716  29.251   5.998  1.00 22.03           O
ATOM   2798  CE2 TYR B 119      26.758  30.784   7.833  1.00 21.73           C
ATOM   2799  CD2 TYR B 119      27.455  31.388   8.877  1.00 21.51           C
ATOM   2800  N   LEU B 120      30.699  32.445  13.101  1.00 20.39           N
ATOM   2801  CA  LEU B 120      31.836  32.818  13.938  1.00 20.10           C
ATOM   2802  C   LEU B 120      32.042  31.841  15.092  1.00 20.02           C
ATOM   2803  O   LEU B 120      33.153  31.356  15.309  1.00 19.87           O
ATOM   2804  CB  LEU B 120      31.675  34.246  14.471  1.00 19.95           C
ATOM   2805  CG  LEU B 120      32.001  35.410  13.528  1.00 19.91           C
ATOM   2806  CD1 LEU B 120      31.516  36.726  14.116  1.00 19.65           C
ATOM   2807  CD2 LEU B 120      33.491  35.488  13.185  1.00 19.49           C
ATOM   2808  N   LEU B 121      30.964  31.546  15.814  1.00 20.01           N
ATOM   2809  CA  LEU B 121      31.026  30.660  16.975  1.00 19.95           C
ATOM   2810  C   LEU B 121      31.207  29.194  16.586  1.00 19.77           C
ATOM   2811  O   LEU B 121      31.815  28.423  17.329  1.00 19.76           O
ATOM   2812  CB  LEU B 121      29.791  30.840  17.868  1.00 19.94           C
ATOM   2813  CG  LEU B 121      29.656  32.194  18.576  1.00 19.90           C
ATOM   2814  CD1 LEU B 121      28.244  32.388  19.099  1.00 20.14           C
ATOM   2815  CD2 LEU B 121      30.665  32.358  19.705  1.00 19.57           C
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FIG. 4UU

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ATOM   2816  N   ASN B 122      30.683  28.821  15.420  1.00 19.62           N
ATOM   2817  CA  ASN B 122      30.844  27.468  14.895  1.00 19.45           C
ATOM   2818  C   ASN B 122      32.290  27.157  14.528  1.00 19.12           C
ATOM   2819  O   ASN B 122      32.768  26.045  14.756  1.00 18.91           O
ATOM   2820  CB  ASN B 122      29.928  27.238  13.692  1.00 19.72           C
ATOM   2821  CG  ASN B 122      28.632  26.544  14.074  1.00 20.61           C
ATOM   2822  OD1 ASN B 122      28.647  25.484  14.706  1.00 21.87           O
ATOM   2823  ND2 ASN B 122      27.503  27.139  13.695  1.00 20.28           N
ATOM   2824  N   TRP B 123      32.980  28.148  13.966  1.00 18.74           N
ATOM   2825  CA  TRP B 123      34.396  28.020  13.643  1.00 18.47           C
ATOM   2826  C   TRP B 123      35.207  27.767  14.908  1.00 18.22           C
ATOM   2827  O   TRP B 123      36.106  26.929  14.917  1.00 18.04           O
ATOM   2828  CB  TRP B 123      34.902  29.265  12.911  1.00 18.46           C
ATOM   2829  CG  TRP B 123      34.348  29.418  11.517  1.00 18.58           C
ATOM   2830  CD1 TRP B 123      33.917  28.418  10.687  1.00 18.75           C
ATOM   2831  NE1 TRP B 123      33.478  28.944   9.495  1.00 18.82           N
ATOM   2832  CE2 TRP B 123      33.623  30.306   9.530  1.00 18.59           C
ATOM   2833  CD2 TRP B 123      34.169  30.640  10.791  1.00 18.39           C
ATOM   2834  CE3 TRP B 123      34.412  31.991  11.077  1.00 18.66           C
ATOM   2835  CZ3 TRP B 123      34.107  32.952  10.109  1.00 18.97           C
ATOM   2836  CH2 TRP B 123      33.568  32.582   8.865  1.00 18.65           C
ATOM   2837  CZ2 TRP B 123      33.320  31.269   8.557  1.00 18.57           C
ATOM   2838  N   CYS B 124      34.856  28.479  15.976  1.00 18.17           N
ATOM   2839  CA  CYS B 124      35.486  28.312  17.282  1.00 18.10           C
ATOM   2840  C   CYS B 124      35.261  26.917  17.862  1.00 18.10           C
ATOM   2841  O   CYS B 124      36.170  26.351  18.467  1.00 18.31           O
ATOM   2842  CB  CYS B 124      34.985  29.378  18.254  1.00 18.05           C
ATOM   2843  SG  CYS B 124      35.578  31.039  17.875  1.00 18.24           S
ATOM   2844  N   VAL B 125      34.056  26.374  17.671  1.00 17.86           N
ATOM   2845  CA  VAL B 125      33.742  24.999  18.066  1.00 17.67           C
ATOM   2846  C   VAL B 125      34.603  24.012  17.283  1.00 17.58           C
ATOM   2847  O   VAL B 125      35.269  23.161  17.871  1.00 17.89           O
ATOM   2848  CB  VAL B 125      32.237  24.657  17.855  1.00 17.72           C
ATOM   2849  CG1 VAL B 125      31.971  23.165  18.067  1.00 17.40           C
ATOM   2850  CG2 VAL B 125      31.360  25.473  18.779  1.00 17.66           C
ATOM   2851  N   GLN B 126      34.587  24.144  15.957  1.00 17.52           N
ATOM   2852  CA  GLN B 126      35.318  23.250  15.057  1.00 17.19           C
ATOM   2853  C   GLN B 126      36.829  23.275  15.298  1.00 16.88           C
ATOM   2854  O   GLN B 126      37.473  22.224  15.317  1.00 16.64           O
ATOM   2855  CB  GLN B 126      34.997  23.579  13.593  1.00 17.36           C
ATOM   2856  CG  GLN B 126      33.527  23.375  13.216  1.00 17.55           C
ATOM   2857  CD  GLN B 126      33.239  23.563  11.731  1.00 17.75           C
ATOM   2858  OE1 GLN B 126      34.118  23.941  10.956  1.00 17.46           O
ATOM   2859  NE2 GLN B 126      32.003  23.291  11.335  1.00 18.32           N
ATOM   2860  N   ILE B 127      37.382  24.474  15.491  1.00 16.54           N
ATOM   2861  CA  ILE B 127      38.805  24.638  15.801  1.00 16.23           C
ATOM   2862  C   ILE B 127      39.158  23.975  17.137  1.00 16.00           C
ATOM   2863  O   ILE B 127      40.196  23.321  17.262  1.00 15.76           O
ATOM   2864  CB  ILE B 127      39.214  26.137  15.788  1.00 16.20           C
ATOM   2865  CG1 ILE B 127      39.070  26.721  14.373  1.00 16.20           C
ATOM   2866  CD1 ILE B 127      39.018  28.244  14.317  1.00 15.72           C
ATOM   2867  CG2 ILE B 127      40.647  26.318  16.293  1.00 16.04           C
ATOM   2868  N   ALA B 128      38.279  24.136  18.123  1.00 15.84           N
ATOM   2869  CA  ALA B 128      38.450  23.501  19.426  1.00 15.76           C
ATOM   2870  C   ALA B 128      38.404  21.974  19.322  1.00 15.68           C
ATOM   2871  O   ALA B 128      39.105  21.281  20.056  1.00 15.52           O
ATOM   2872  CB  ALA B 128      37.406  24.009  20.409  1.00 15.66           C
ATOM   2873  N   LYS B 129      37.584  21.465  18.404  1.00 15.73           N
ATOM   2874  CA  LYS B 129      37.468  20.027  18.161  1.00 15.84           C
ATOM   2875  C   LYS B 129      38.739  19.434  17.547  1.00 15.85           C
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FIG. 4VV

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ATOM   2876  O   LYS B 129      39.167  18.345  17.926  1.00 16.07           O
ATOM   2877  CB  LYS B 129      36.263  19.728  17.268  1.00 15.82           C
ATOM   2878  CG  LYS B 129      34.967  19.531  18.029  1.00 15.93           C
ATOM   2879  CD  LYS B 129      33.783  19.410  17.084  1.00 15.72           C
ATOM   2880  CE  LYS B 129      32.476  19.362  17.858  1.00 15.83           C
ATOM   2881  NZ  LYS B 129      31.305  19.242  16.946  1.00 16.38           N
ATOM   2882  N   GLY B 130      39.331  20.154  16.600  1.00 15.93           N
ATOM   2883  CA  GLY B 130      40.568  19.727  15.972  1.00 15.97           C
ATOM   2884  C   GLY B 130      41.735  19.725  16.940  1.00 16.03           C
ATOM   2885  O   GLY B 130      42.549  18.801  16.941  1.00 16.07           O
ATOM   2886  N   MET B 131      41.809  20.764  17.765  1.00 16.29           N
ATOM   2887  CA  MET B 131      42.863  20.895  18.769  1.00 16.62           C
ATOM   2888  C   MET B 131      42.734  19.869  19.897  1.00 16.73           C
ATOM   2889  O   MET B 131      43.746  19.394  20.423  1.00 16.84           O
ATOM   2890  CB  MET B 131      42.885  22.312  19.339  1.00 16.67           C
ATOM   2891  CG  MET B 131      43.430  23.370  18.387  1.00 17.05           C
ATOM   2892  SD  MET B 131      45.008  22.951  17.585  1.00 17.91           S
ATOM   2893  CE  MET B 131      46.103  22.850  18.989  1.00 17.40           C
ATOM   2894  N   ASN B 132      41.493  19.529  20.251  1.00 16.65           N
ATOM   2895  CA  ASN B 132      41.211  18.486  21.237  1.00 16.95           C
ATOM   2896  C   ASN B 132      41.600  17.092  20.742  1.00 17.17           C
ATOM   2897  O   ASN B 132      42.005  16.235  21.532  1.00 17.06           O
ATOM   2898  CB  ASN B 132      39.734  18.513  21.644  1.00 17.04           C
ATOM   2899  CG  ASN B 132      39.374  17.415  22.638  1.00 17.08           C
ATOM   2900  OD1 ASN B 132      39.711  17.494  23.820  1.00 17.27           O
ATOM   2901  ND2 ASN B 132      38.688  16.385  22.158  1.00 16.77           N
ATOM   2902  N   TYR B 133      41.470  16.876  19.435  1.00 17.40           N
ATOM   2903  CA  TYR B 133      41.884  15.626  18.810  1.00 17.86           C
ATOM   2904  C   TYR B 133      43.389  15.416  18.979  1.00 18.34           C
ATOM   2905  O   TYR B 133      43.836  14.308  19.280  1.00 18.24           O
ATOM   2906  CB  TYR B 133      41.493  15.605  17.323  1.00 17.73           C
ATOM   2907  CG  TYR B 133      42.120  14.470  16.538  1.00 17.62           C
ATOM   2908  CD1 TYR B 133      41.546  13.199  16.533  1.00 17.36           C
ATOM   2909  CE1 TYR B 133      42.126  12.149  15.822  1.00 17.33           C
ATOM   2910  CZ  TYR B 133      43.291  12.370  15.105  1.00 17.43           C
ATOM   2911  OH  TYR B 133      43.867  11.339  14.400  1.00 17.21           O
ATOM   2912  CE2 TYR B 133      43.881  13.625  15.095  1.00 17.75           C
ATOM   2913  CD2 TYR B 133      43.295  14.667  15.810  1.00 17.67           C
ATOM   2914  N   LEU B 134      44.155  16.491  18.790  1.00 19.19           N
ATOM   2915  CA  LEU B 134      45.615  16.446  18.881  1.00 19.69           C
ATOM   2916  C   LEU B 134      46.092  16.263  20.319  1.00 19.99           C
ATOM   2917  O   LEU B 134      47.029  15.506  20.563  1.00 19.99           O
ATOM   2918  CB  LEU B 134      46.251  17.700  18.260  1.00 19.75           C
ATOM   2919  CG  LEU B 134      45.903  18.102  16.819  1.00 19.96           C
ATOM   2920  CD1 LEU B 134      46.316  19.544  16.556  1.00 20.06           C
ATOM   2921  CD2 LEU B 134      46.536  17.172  15.784  1.00 19.80           C
ATOM   2922  N   GLU B 135      45.446  16.947  21.265  1.00 20.49           N
ATOM   2923  CA  GLU B 135      45.793  16.813  22.682  1.00 21.01           C
ATOM   2924  C   GLU B 135      45.592  15.384  23.184  1.00 21.11           C
ATOM   2925  O   GLU B 135      46.452  14.842  23.878  1.00 21.37           O
ATOM   2926  CB  GLU B 135      45.009  17.807  23.547  1.00 21.19           C
ATOM   2927  CG  GLU B 135      45.281  17.670  25.043  1.00 21.71           C
ATOM   2928  CD  GLU B 135      44.607  18.739  25.884  1.00 22.55           C
ATOM   2929  OE1 GLU B 135      44.984  18.880  27.068  1.00 23.01           O
ATOM   2930  OE2 GLU B 135      43.703  19.437  25.373  1.00 22.88           O
ATOM   2931  N   ASP B 136      44.461  14.779  22.822  1.00 21.26           N
ATOM   2932  CA  ASP B 136      44.170  13.384  23.156  1.00 21.22           C
ATOM   2933  C   ASP B 136      45.202  12.441  22.548  1.00 21.29           C
ATOM   2934  O   ASP B 136      45.417  11.331  23.041  1.00 21.52           O
ATOM   2935  CB  ASP B 136      42.776  13.001  22.664  1.00 21.12           C
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FIG. 4WW

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ATOM   2936  CG  ASP B 136      41.676  13.506  23.571  1.00 21.19           C
ATOM   2937  OD1 ASP B 136      40.496  13.219  23.274  1.00 21.35           O
ATOM   2938  OD2 ASP B 136      41.888  14.192  24.598  1.00 20.89           O
ATOM   2939  N   ARG B 137      45.832  12.901  21.473  1.00 21.22           N
ATOM   2940  CA  ARG B 137      46.881  12.156  20.797  1.00 21.19           C
ATOM   2941  C   ARG B 137      48.273  12.553  21.287  1.00 21.50           C
ATOM   2942  O   ARG B 137      49.276  12.034  20.792  1.00 21.78           O
ATOM   2943  CB  ARG B 137      46.777  12.385  19.293  1.00 21.11           C
ATOM   2944  CG  ARG B 137      45.720  11.541  18.622  1.00 20.57           C
ATOM   2945  CD  ARG B 137      46.293  10.363  17.886  1.00 20.38           C
ATOM   2946  NE  ARG B 137      46.161  10.528  16.448  1.00 20.23           N
ATOM   2947  CZ  ARG B 137      47.039  10.101  15.555  1.00 20.44           C
ATOM   2948  NH1 ARG B 137      48.146   9.475  15.933  1.00 20.25           N
ATOM   2949  NH2 ARG B 137      46.805  10.304  14.270  1.00 21.11           N
ATOM   2950  N   ARG B 138      48.323  13.470  22.258  1.00 21.46           N
ATOM   2951  CA  ARG B 138      49.576  14.008  22.800  1.00 21.41           C
ATOM   2952  C   ARG B 138      50.406  14.722  21.726  1.00 21.38           C
ATOM   2953  O   ARG B 138      51.634  14.597  21.682  1.00 21.48           O
ATOM   2954  CB  ARG B 138      50.395  12.914  23.507  1.00 21.43           C
ATOM   2955  CG  ARG B 138      49.737  12.352  24.760  1.00 21.40           C
ATOM   2956  N   LEU B 139      49.714  15.477  20.874  1.00 21.20           N
ATOM   2957  CA  LEU B 139      50.327  16.223  19.779  1.00 20.98           C
ATOM   2958  C   LEU B 139      50.226  17.729  20.023  1.00 20.89           C
ATOM   2959  O   LEU B 139      49.163  18.237  20.394  1.00 21.12           O
ATOM   2960  CB  LEU B 139      49.643  15.864  18.455  1.00 21.10           C
ATOM   2961  CG  LEU B 139      50.241  14.808  17.511  1.00 21.43           C
ATOM   2962  CD1 LEU B 139      50.470  13.462  18.197  1.00 21.52           C
ATOM   2963  CD2 LEU B 139      49.332  14.626  16.303  1.00 21.15           C
ATOM   2964  N   VAL B 140      51.338  18.433  19.817  1.00 20.57           N
ATOM   2965  CA  VAL B 140      51.393  19.887  19.974  1.00 20.16           C
ATOM   2966  C   VAL B 140      51.525  20.560  18.608  1.00 19.92           C
ATOM   2967  O   VAL B 140      52.339  20.153  17.780  1.00 20.12           O
ATOM   2968  CB  VAL B 140      52.564  20.336  20.898  1.00 20.16           C
ATOM   2969  CG1 VAL B 140      52.452  21.824  21.241  1.00 20.11           C
ATOM   2970  CG2 VAL B 140      52.607  19.504  22.173  1.00 19.85           C
ATOM   2971  N   HIS B 141      50.714  21.587  18.380  1.00 19.72           N
ATOM   2972  CA  HIS B 141      50.731  22.321  17.118  1.00 19.24           C
ATOM   2973  C   HIS B 141      51.921  23.272  17.024  1.00 18.97           C
ATOM   2974  O   HIS B 141      52.681  23.217  16.055  1.00 18.93           O
ATOM   2975  CB  HIS B 141      49.421  23.084  16.917  1.00 19.26           C
ATOM   2976  CG  HIS B 141      49.247  23.616  15.531  1.00 19.28           C
ATOM   2977  ND1 HIS B 141      48.259  23.169  14.682  1.00 19.51           N
ATOM   2978  CE1 HIS B 141      48.348  23.812  13.532  1.00 19.59           C
ATOM   2979  NE2 HIS B 141      49.361  24.656  13.602  1.00 19.42           N
ATOM   2980  CD2 HIS B 141      49.940  24.553  14.842  1.00 19.11           C
ATOM   2981  N   ARG B 142      52.056  24.147  18.025  1.00 18.49           N
ATOM   2982  CA  ARG B 142      53.168  25.101  18.142  1.00 18.18           C
ATOM   2983  C   ARG B 142      53.036  26.365  17.282  1.00 17.91           C
ATOM   2984  O   ARG B 142      53.696  27.373  17.553  1.00 17.68           O
ATOM   2985  CB  ARG B 142      54.504  24.439  17.779  1.00 18.23           C
ATOM   2986  CG  ARG B 142      55.068  23.552  18.868  1.00 18.68           C
ATOM   2987  CD  ARG B 142      56.479  23.076  18.603  1.00 19.06           C
ATOM   2988  NE  ARG B 142      56.808  21.913  19.417  1.00 20.04           N
ATOM   2989  CZ  ARG B 142      58.033  21.588  19.806  1.00 20.63           C
ATOM   2990  NH1 ARG B 142      58.223  20.506  20.553  1.00 20.97           N
ATOM   2991  NH2 ARG B 142      59.072  22.336  19.457  1.00 20.60           N
ATOM   2992  N   ASP B 143      52.088  26.435  16.410  1.00 17.56           N
ATOM   2993  CA  ASP B 143      51.905  27.568  15.505  1.00 17.29           C
ATOM   2994  C   ASP B 143      50.438  27.760  15.080  1.00 17.09           C
ATOM   2995  O   ASP B 143      50.131  27.927  13.897  1.00 16.75           O
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FIG. 4XX

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ATOM   2996  CB  ASP B 143      52.833  27.410  14.294  1.00 17.20           C
ATOM   2997  CG  ASP B 143      52.791  28.598  13.351  1.00 17.40           C
ATOM   2998  OD1 ASP B 143      52.632  29.750  13.809  1.00 17.98           O
ATOM   2999  OD2 ASP B 143      52.910  28.466  12.118  1.00 17.68           O
ATOM   3000  N   LEU B 144      49.533  27.736  16.055  1.00 16.94           N
ATOM   3001  CA  LEU B 144      48.114  27.924  15.771  1.00 16.92           C
ATOM   3002  C   LEU B 144      47.790  29.404  15.589  1.00 16.96           C
ATOM   3003  O   LEU B 144      48.176  30.245  16.405  1.00 17.13           O
ATOM   3004  CB  LEU B 144      47.235  27.291  16.859  1.00 16.90           C
ATOM   3005  CG  LEU B 144      45.706  27.351  16.717  1.00 17.00           C
ATOM   3006  CD1 LEU B 144      45.208  26.711  15.416  1.00 17.04           C
ATOM   3007  CD2 LEU B 144      45.037  26.704  17.920  1.00 16.42           C
ATOM   3008  N   ALA B 145      47.094  29.702  14.496  1.00 16.70           N
ATOM   3009  CA  ALA B 145      46.692  31.057  14.144  1.00 16.53           C
ATOM   3010  C   ALA B 145      45.571  30.984  13.116  1.00 16.37           C
ATOM   3011  O   ALA B 145      45.374  29.943  12.486  1.00 16.65           O
ATOM   3012  CB  ALA B 145      47.875  31.830  13.586  1.00 16.61           C
ATOM   3013  N   ALA B 146      44.841  32.084  12.943  1.00 15.84           N
ATOM   3014  CA  ALA B 146      43.747  32.135  11.975  1.00 15.60           C
ATOM   3015  C   ALA B 146      44.236  31.890  10.546  1.00 15.40           C
ATOM   3016  O   ALA B 146      43.462  31.472   9.680  1.00 15.42           O
ATOM   3017  CB  ALA B 146      43.000  33.459  12.076  1.00 15.51           C
ATOM   3018  N   ARG B 147      45.525  32.147  10.318  1.00 15.24           N
ATOM   3019  CA  ARG B 147      46.177  31.907   9.029  1.00 14.90           C
ATOM   3020  C   ARG B 147      46.432  30.416   8.801  1.00 15.02           C
ATOM   3021  O   ARG B 147      46.545  29.968   7.661  1.00 15.05           O
ATOM   3022  CB  ARG B 147      47.492  32.695   8.934  1.00 14.62           C
ATOM   3023  CG  ARG B 147      48.573  32.241   9.913  1.00 14.24           C
ATOM   3024  CD  ARG B 147      49.880  33.010   9.835  1.00 13.92           C
ATOM   3025  NE  ARG B 147      50.873  32.464  10.760  1.00 13.72           N
ATOM   3026  CZ  ARG B 147      51.056  32.881  12.011  1.00 13.74           C
ATOM   3027  NH1 ARG B 147      50.318  33.865  12.511  1.00 13.22           N
ATOM   3028  NH2 ARG B 147      51.981  32.308  12.771  1.00 13.81           N
ATOM   3029  N   ASN B 148      46.533  29.662   9.895  1.00 15.09           N
ATOM   3030  CA  ASN B 148      46.710  28.214   9.840  1.00 15.09           C
ATOM   3031  C   ASN B 148      45.393  27.473  10.078  1.00 15.13           C
ATOM   3032  O   ASN B 148      45.367  26.387  10.662  1.00 15.07           O
ATOM   3033  CB  ASN B 148      47.792  27.757  10.829  1.00 15.10           C
ATOM   3034  CG  ASN B 148      49.191  28.191  10.412  1.00 15.28           C
ATOM   3035  OD1 ASN B 148      49.506  28.264   9.226  1.00 15.25           O
ATOM   3036  ND2 ASN B 148      50.037  28.480  11.392  1.00 15.40           N
ATOM   3037  N   VAL B 149      44.299  28.086   9.630  1.00 15.20           N
ATOM   3038  CA  VAL B 149      42.990  27.444   9.608  1.00 15.33           C
ATOM   3039  C   VAL B 149      42.419  27.600   8.202  1.00 15.55           C
ATOM   3040  O   VAL B 149      42.070  28.708   7.785  1.00 15.74           O
ATOM   3041  CB  VAL B 149      42.015  28.047  10.651  1.00 15.25           C
ATOM   3042  CG1 VAL B 149      40.663  27.350  10.589  1.00 14.94           C
ATOM   3043  CG2 VAL B 149      42.593  27.957  12.060  1.00 15.54           C
ATOM   3044  N   LEU B 150      42.334  26.489   7.475  1.00 15.45           N
ATOM   3045  CA  LEU B 150      41.876  26.511   6.089  1.00 15.54           C
ATOM   3046  C   LEU B 150      40.356  26.391   5.953  1.00 15.55           C
ATOM   3047  O   LEU B 150      39.698  25.756   6.780  1.00 15.45           O
ATOM   3048  CB  LEU B 150      42.583  25.429   5.270  1.00 15.58           C
ATOM   3049  CG  LEU B 150      44.086  25.620   5.036  1.00 15.49           C
ATOM   3050  CD1 LEU B 150      44.684  24.382   4.380  1.00 15.15           C
ATOM   3051  CD2 LEU B 150      44.382  26.874   4.210  1.00 15.40           C
ATOM   3052  N   VAL B 151      39.819  27.005   4.901  1.00 15.39           N
ATOM   3053  CA  VAL B 151      38.388  26.986   4.613  1.00 15.29           C
ATOM   3054  C   VAL B 151      38.078  25.907   3.577  1.00 15.56           C
ATOM   3055  O   VAL B 151      38.458  26.034   2.409  1.00 15.39           O
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FIG. 4YY

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ATOM   3056  CB  VAL B 151      37.894  28.371   4.095  1.00 15.34           C
ATOM   3057  CG1 VAL B 151      36.407  28.339   3.753  1.00 15.08           C
ATOM   3058  CG2 VAL B 151      38.183  29.474   5.110  1.00 14.95           C
ATOM   3059  N   LYS B 152      37.406  24.841   4.010  1.00 15.80           N
ATOM   3060  CA  LYS B 152      36.938  23.803   3.093  1.00 16.19           C
ATOM   3061  C   LYS B 152      35.669  24.294   2.406  1.00 16.30           C
ATOM   3062  O   LYS B 152      35.595  24.343   1.175  1.00 16.40           O
ATOM   3063  CB  LYS B 152      36.690  22.482   3.828  1.00 16.33           C
ATOM   3064  CG  LYS B 152      36.565  21.273   2.907  1.00 16.80           C
ATOM   3065  CD  LYS B 152      36.069  20.045   3.657  1.00 17.29           C
ATOM   3066  CE  LYS B 152      35.664  18.933   2.696  1.00 17.47           C
ATOM   3067  NZ  LYS B 152      36.842  18.180   2.180  1.00 18.15           N
ATOM   3068  N   THR B 153      34.673  24.635   3.219  1.00 16.35           N
ATOM   3069  CA  THR B 153      33.512  25.412   2.794  1.00 16.56           C
ATOM   3070  C   THR B 153      33.318  26.491   3.862  1.00 16.47           C
ATOM   3071  O   THR B 153      33.941  26.409   4.922  1.00 16.60           O
ATOM   3072  CB  THR B 153      32.244  24.528   2.683  1.00 16.59           C
ATOM   3073  OG1 THR B 153      31.869  24.054   3.981  1.00 17.12           O
ATOM   3074  CG2 THR B 153      32.510  23.250   1.893  1.00 16.76           C
ATOM   3075  N   PRO B 154      32.487  27.503   3.606  1.00 16.43           N
ATOM   3076  CA  PRO B 154      32.172  28.503   4.637  1.00 16.36           C
ATOM   3077  C   PRO B 154      31.725  27.882   5.967  1.00 16.32           C
ATOM   3078  O   PRO B 154      31.873  28.517   7.013  1.00 16.22           O
ATOM   3079  CB  PRO B 154      31.027  29.300   4.008  1.00 16.41           C
ATOM   3080  CG  PRO B 154      31.269  29.196   2.547  1.00 16.53           C
ATOM   3081  CD  PRO B 154      31.818  27.810   2.326  1.00 16.53           C
ATOM   3082  N   GLN B 155      31.210  26.653   5.918  1.00 16.31           N
ATOM   3083  CA  GLN B 155      30.746  25.946   7.113  1.00 16.12           C
ATOM   3084  C   GLN B 155      31.713  24.868   7.614  1.00 15.78           C
ATOM   3085  O   GLN B 155      31.458  24.234   8.638  1.00 15.82           O
ATOM   3086  CB  GLN B 155      29.348  25.345   6.891  1.00 16.33           C
ATOM   3087  CG  GLN B 155      28.877  25.304   5.442  1.00 16.87           C
ATOM   3088  CD  GLN B 155      27.835  26.364   5.132  1.00 17.45           C
ATOM   3089  OE1 GLN B 155      27.972  27.115   4.159  1.00 17.28           O
ATOM   3090  NE2 GLN B 155      26.791  26.430   5.955  1.00 17.68           N
ATOM   3091  N   HIS B 156      32.819  24.669   6.902  1.00 15.45           N
ATOM   3092  CA  HIS B 156      33.798  23.642   7.261  1.00 15.21           C
ATOM   3093  C   HIS B 156      35.227  24.191   7.244  1.00 15.03           C
ATOM   3094  O   HIS B 156      35.750  24.551   6.191  1.00 14.92           O
ATOM   3095  CB  HIS B 156      33.668  22.435   6.319  1.00 15.13           C
ATOM   3096  CG  HIS B 156      34.241  21.160   6.865  1.00 14.83           C
ATOM   3097  ND1 HIS B 156      33.918  19.924   6.348  1.00 14.44           N
ATOM   3098  CE1 HIS B 156      34.569  18.986   7.011  1.00 13.87           C
ATOM   3099  NE2 HIS B 156      35.303  19.569   7.942  1.00 13.92           N
ATOM   3100  CD2 HIS B 156      35.119  20.928   7.870  1.00 14.33           C
ATOM   3101  N   VAL B 157      35.851  24.254   8.418  1.00 14.99           N
ATOM   3102  CA  VAL B 157      37.221  24.757   8.540  1.00 14.97           C
ATOM   3103  C   VAL B 157      38.180  23.715   9.130  1.00 15.29           C
ATOM   3104  O   VAL B 157      37.805  22.945  10.018  1.00 15.40           O
ATOM   3105  CB  VAL B 157      37.298  26.090   9.336  1.00 14.72           C
ATOM   3106  CG1 VAL B 157      36.646  27.225   8.556  1.00 14.48           C
ATOM   3107  CG2 VAL B 157      36.676  25.954  10.720  1.00 14.77           C
ATOM   3108  N   LYS B 158      39.413  23.696   8.623  1.00 15.44           N
ATOM   3109  CA  LYS B 158      40.409  22.708   9.036  1.00 15.73           C
ATOM   3110  C   LYS B 158      41.712  23.358   9.501  1.00 15.85           C
ATOM   3111  O   LYS B 158      42.260  24.231   8.823  1.00 15.82           O
ATOM   3112  CB  LYS B 158      40.716  21.734   7.893  1.00 15.69           C
ATOM   3113  CG  LYS B 158      39.558  20.858   7.450  1.00 16.28           C
ATOM   3114  CD  LYS B 158      39.857  20.192   6.117  1.00 16.25           C
ATOM   3115  CE  LYS B 158      39.785  18.673   6.225  1.00 16.82           C
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FIG. 4ZZ

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ATOM   3116  NZ  LYS B 158      41.043  18.074   6.764  1.00 16.59           N
ATOM   3117  N   ILE B 159      42.201  22.922  10.658  1.00 15.85           N
ATOM   3118  CA  ILE B 159      43.514  23.332  11.143  1.00 15.88           C
ATOM   3119  C   ILE B 159      44.590  22.696  10.264  1.00 16.08           C
ATOM   3120  O   ILE B 159      44.486  21.524   9.889  1.00 15.98           O
ATOM   3121  CB  ILE B 159      43.705  22.932  12.626  1.00 15.81           C
ATOM   3122  CG1 ILE B 159      42.600  23.536  13.497  1.00 15.59           C
ATOM   3123  CD1 ILE B 159      42.316  22.751  14.754  1.00 15.22           C
ATOM   3124  CG2 ILE B 159      45.077  23.369  13.135  1.00 15.73           C
ATOM   3125  N   THR B 160      45.611  23.483   9.932  1.00 16.19           N
ATOM   3126  CA  THR B 160      46.715  23.028   9.089  1.00 16.39           C
ATOM   3127  C   THR B 160      48.058  23.378   9.727  1.00 16.67           C
ATOM   3128  O   THR B 160      48.105  24.116  10.711  1.00 16.53           O
ATOM   3129  CB  THR B 160      46.596  23.631   7.661  1.00 16.35           C
ATOM   3130  OG1 THR B 160      47.731  23.248   6.870  1.00 16.23           O
ATOM   3131  CG2 THR B 160      46.683  25.156   7.695  1.00 15.94           C
ATOM   3132  N   ASP B 161      49.137  22.839   9.159  1.00 17.21           N
ATOM   3133  CA  ASP B 161      50.513  23.080   9.621  1.00 17.93           C
ATOM   3134  C   ASP B 161      50.819  22.527  11.015  1.00 18.47           C
ATOM   3135  O   ASP B 161      51.803  22.925  11.647  1.00 18.68           O
ATOM   3136  CB  ASP B 161      50.871  24.572   9.555  1.00 17.73           C
ATOM   3137  CG  ASP B 161      51.033  25.074   8.138  1.00 17.77           C
ATOM   3138  OD1 ASP B 161      51.278  24.259   7.227  1.00 17.71           O
ATOM   3139  OD2 ASP B 161      50.933  26.279   7.837  1.00 18.29           O
ATOM   3140  N   PHE B 162      49.977  21.613  11.487  1.00 19.04           N
ATOM   3141  CA  PHE B 162      50.176  20.972  12.783  1.00 19.68           C
ATOM   3142  C   PHE B 162      51.543  20.292  12.833  1.00 20.09           C
ATOM   3143  O   PHE B 162      51.934  19.592  11.891  1.00 20.13           O
ATOM   3144  CB  PHE B 162      49.052  19.965  13.065  1.00 19.79           C
ATOM   3145  CG  PHE B 162      49.025  18.803  12.115  1.00 19.88           C
ATOM   3146  CD1 PHE B 162      49.475  17.556  12.518  1.00 20.15           C
ATOM   3147  CE1 PHE B 162      49.459  16.479  11.636  1.00 20.74           C
ATOM   3148  CZ  PHE B 162      48.990  16.645  10.336  1.00 20.08           C
ATOM   3149  CE2 PHE B 162      48.548  17.887   9.923  1.00 20.37           C
ATOM   3150  CD2 PHE B 162      48.559  18.958  10.811  1.00 20.47           C
ATOM   3151  N   GLY B 163      52.271  20.527  13.925  1.00 20.48           N
ATOM   3152  CA  GLY B 163      53.586  19.945  14.129  1.00 20.74           C
ATOM   3153  C   GLY B 163      54.492  20.057  12.916  1.00 21.18           C
ATOM   3154  O   GLY B 163      54.865  19.045  12.322  1.00 21.69           O
ATOM   3155  N   LEU B 164      54.815  21.291  12.536  1.00 21.26           N
ATOM   3156  CA  LEU B 164      55.793  21.569  11.487  1.00 21.32           C
ATOM   3157  C   LEU B 164      57.021  22.244  12.091  1.00 21.56           C
ATOM   3158  O   LEU B 164      58.064  22.361  11.442  1.00 21.57           O
ATOM   3159  CB  LEU B 164      55.200  22.490  10.417  1.00 21.23           C
ATOM   3160  CG  LEU B 164      54.224  21.977   9.354  1.00 21.46           C
ATOM   3161  CD1 LEU B 164      54.060  23.039   8.293  1.00 21.29           C
ATOM   3162  CD2 LEU B 164      54.690  20.689   8.712  1.00 21.59           C
ATOM   3163  N   ALA B 165      56.886  22.691  13.338  1.00 21.73           N
ATOM   3164  CA  ALA B 165      57.956  23.396  14.035  1.00 21.74           C
ATOM   3165  C   ALA B 165      59.047  22.447  14.528  1.00 21.84           C
ATOM   3166  O   ALA B 165      60.149  22.886  14.868  1.00 22.15           O
ATOM   3167  CB  ALA B 165      57.390  24.216  15.183  1.00 21.73           C
ATOM   3168  N   LYS B 166      58.732  21.153  14.567  1.00 21.83           N
ATOM   3169  CA  LYS B 166      59.709  20.115  14.891  1.00 21.68           C
ATOM   3170  C   LYS B 166      60.661  19.920  13.715  1.00 21.83           C
ATOM   3171  O   LYS B 166      60.234  19.879  12.554  1.00 22.08           O
ATOM   3172  CB  LYS B 166      59.011  18.789  15.214  1.00 21.77           C
ATOM   3173  CG  LYS B 166      58.011  18.840  16.373  1.00 21.98           C
ATOM   3174  CD  LYS B 166      57.480  17.442  16.695  1.00 22.41           C
ATOM   3175  CE  LYS B 166      56.098  17.498  17.346  1.00 22.83           C
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FIG. 4AAA

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ATOM   3176  NZ  LYS B 166      55.809  16.260  18.145  1.00 22.79           N
ATOM   3177  N   PRO B 183      56.715  33.625  15.625  1.00 22.42           N
ATOM   3178  CA  PRO B 183      55.580  34.544  15.765  1.00 22.25           C
ATOM   3179  C   PRO B 183      55.212  34.748  17.232  1.00 22.18           C
ATOM   3180  O   PRO B 183      54.353  34.045  17.774  1.00 22.27           O
ATOM   3181  CB  PRO B 183      54.457  33.829  15.009  1.00 22.31           C
ATOM   3182  CG  PRO B 183      55.172  32.930  14.053  1.00 22.53           C
ATOM   3183  CD  PRO B 183      56.379  32.450  14.804  1.00 22.50           C
ATOM   3184  N   ILE B 184      55.881  35.719  17.851  1.00 21.96           N
ATOM   3185  CA  ILE B 184      55.735  36.052  19.267  1.00 21.71           C
ATOM   3186  C   ILE B 184      54.295  36.406  19.654  1.00 21.65           C
ATOM   3187  O   ILE B 184      53.838  36.060  20.749  1.00 21.87           O
ATOM   3188  CB  ILE B 184      56.713  37.217  19.626  1.00 21.83           C
ATOM   3189  CG1 ILE B 184      58.176  36.777  19.453  1.00 21.78           C
ATOM   3190  CD1 ILE B 184      58.720  35.862  20.554  1.00 22.06           C
ATOM   3191  CG2 ILE B 184      56.444  37.788  21.028  1.00 21.83           C
ATOM   3192  N   LYS B 185      53.585  37.074  18.747  1.00 21.28           N
ATOM   3193  CA  LYS B 185      52.247  37.607  19.024  1.00 20.93           C
ATOM   3194  C   LYS B 185      51.169  36.536  19.241  1.00 20.79           C
ATOM   3195  O   LYS B 185      50.058  36.849  19.677  1.00 20.47           O
ATOM   3196  CB  LYS B 185      51.823  38.590  17.926  1.00 20.75           C
ATOM   3197  CG  LYS B 185      52.863  39.659  17.628  1.00 20.34           C
ATOM   3198  CD  LYS B 185      52.235  40.912  17.060  1.00 19.80           C
ATOM   3199  CE  LYS B 185      52.892  42.156  17.628  1.00 19.51           C
ATOM   3200  NZ  LYS B 185      53.140  43.181  16.583  1.00 19.03           N
ATOM   3201  N   TRP B 186      51.510  35.282  18.950  1.00 20.74           N
ATOM   3202  CA  TRP B 186      50.610  34.151  19.176  1.00 20.82           C
ATOM   3203  C   TRP B 186      51.092  33.236  20.299  1.00 21.08           C
ATOM   3204  O   TRP B 186      50.361  32.350  20.742  1.00 21.18           O
ATOM   3205  CB  TRP B 186      50.440  33.341  17.890  1.00 20.63           C
ATOM   3206  CG  TRP B 186      49.500  33.972  16.921  1.00 19.96           C
ATOM   3207  CD1 TRP B 186      48.182  33.667  16.742  1.00 19.61           C
ATOM   3208  NE1 TRP B 186      47.640  34.464  15.762  1.00 19.54           N
ATOM   3209  CE2 TRP B 186      48.612  35.306  15.285  1.00 19.48           C
ATOM   3210  CD2 TRP B 186      49.799  35.023  15.996  1.00 19.21           C
ATOM   3211  CE3 TRP B 186      50.954  35.757  15.690  1.00 18.81           C
ATOM   3212  CZ3 TRP B 186      50.888  36.737  14.700  1.00 18.50           C
ATOM   3213  CH2 TRP B 186      49.691  36.993  14.014  1.00 18.50           C
ATOM   3214  CZ2 TRP B 186      48.545  36.294  14.291  1.00 18.96           C
ATOM   3215  N   MET B 187      52.319  33.467  20.760  1.00 21.43           N
ATOM   3216  CA  MET B 187      52.975  32.579  21.715  1.00 21.61           C
ATOM   3217  C   MET B 187      52.628  32.876  23.168  1.00 21.85           C
ATOM   3218  O   MET B 187      52.400  34.030  23.545  1.00 21.99           O
ATOM   3219  CB  MET B 187      54.492  32.637  21.536  1.00 21.62           C
ATOM   3220  CG  MET B 187      55.005  31.890  20.320  1.00 21.92           C
ATOM   3221  SD  MET B 187      56.599  32.519  19.779  1.00 23.04           S
ATOM   3222  CE  MET B 187      57.688  31.747  20.961  1.00 22.66           C
ATOM   3223  N   ALA B 188      52.596  31.818  23.976  1.00 21.96           N
ATOM   3224  CA  ALA B 188      52.451  31.941  25.421  1.00 21.93           C
ATOM   3225  C   ALA B 188      53.754  32.467  26.022  1.00 21.97           C
ATOM   3226  O   ALA B 188      54.826  32.291  25.435  1.00 21.90           O
ATOM   3227  CB  ALA B 188      52.082  30.600  26.026  1.00 21.97           C
ATOM   3228  N   LEU B 189      53.657  33.106  27.188  1.00 21.93           N
ATOM   3229  CA  LEU B 189      54.824  33.690  27.856  1.00 21.88           C
ATOM   3230  C   LEU B 189      55.943  32.675  28.087  1.00 21.74           C
ATOM   3231  O   LEU B 189      57.116  32.990  27.880  1.00 22.00           O
ATOM   3232  CB  LEU B 189      54.426  34.362  29.176  1.00 22.00           C
ATOM   3233  CG  LEU B 189      55.451  35.311  29.813  1.00 22.38           C
ATOM   3234  CD1 LEU B 189      55.537  36.650  29.084  1.00 22.36           C
ATOM   3235  CD2 LEU B 189      55.142  35.528  31.288  1.00 22.97           C
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FIG. 4BBB

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ATOM   3236  N   GLU B 190      55.575  31.463  28.501  1.00 21.45           N
ATOM   3237  CA  GLU B 190      56.541  30.386  28.726  1.00 21.15           C
ATOM   3238  C   GLU B 190      57.252  29.959  27.439  1.00 21.17           C
ATOM   3239  O   GLU B 190      58.408  29.532  27.475  1.00 21.19           O
ATOM   3240  CB  GLU B 190      55.881  29.183  29.419  1.00 21.12           C
ATOM   3241  CG  GLU B 190      54.757  28.513  28.640  1.00 20.85           C
ATOM   3242  CD  GLU B 190      53.377  29.014  29.030  1.00 20.68           C
ATOM   3243  OE1 GLU B 190      52.434  28.197  29.037  1.00 20.64           O
ATOM   3244  OE2 GLU B 190      53.225  30.221  29.320  1.00 20.22           O
ATOM   3245  N   SER B 191      56.559  30.086  26.309  1.00 21.18           N
ATOM   3246  CA  SER B 191      57.142  29.788  25.003  1.00 21.15           C
ATOM   3247  C   SER B 191      58.086  30.902  24.567  1.00 21.19           C
ATOM   3248  O   SER B 191      59.075  30.653  23.880  1.00 21.13           O
ATOM   3249  CB  SER B 191      56.048  29.582  23.953  1.00 21.15           C
ATOM   3250  OG  SER B 191      55.160  28.546  24.330  1.00 20.81           O
ATOM   3251  N   ILE B 192      57.774  32.132  24.969  1.00 21.42           N
ATOM   3252  CA  ILE B 192      58.617  33.279  24.643  1.00 21.55           C
ATOM   3253  C   ILE B 192      59.885  33.273  25.501  1.00 21.47           C
ATOM   3254  O   ILE B 192      60.990  33.442  24.982  1.00 21.39           O
ATOM   3255  CB  ILE B 192      57.832  34.613  24.791  1.00 21.56           C
ATOM   3256  CG1 ILE B 192      56.640  34.643  23.833  1.00 21.77           C
ATOM   3257  CD1 ILE B 192      55.467  35.476  24.324  1.00 22.48           C
ATOM   3258  CG2 ILE B 192      58.734  35.819  24.517  1.00 21.63           C
ATOM   3259  N   LEU B 193      59.719  33.051  26.803  1.00 21.39           N
ATOM   3260  CA  LEU B 193      60.829  33.146  27.750  1.00 21.60           C
ATOM   3261  C   LEU B 193      61.710  31.902  27.789  1.00 21.76           C
ATOM   3262  O   LEU B 193      62.937  32.012  27.864  1.00 21.97           O
ATOM   3263  CB  LEU B 193      60.321  33.476  29.161  1.00 21.51           C
ATOM   3264  CG  LEU B 193      59.616  34.819  29.392  1.00 21.65           C
ATOM   3265  CD1 LEU B 193      59.084  34.908  30.815  1.00 21.26           C
ATOM   3266  CD2 LEU B 193      60.528  36.005  29.083  1.00 21.67           C
ATOM   3267  N   HIS B 194      61.087  30.726  27.736  1.00 21.75           N
ATOM   3268  CA  HIS B 194      61.800  29.469  27.956  1.00 21.77           C
ATOM   3269  C   HIS B 194      61.667  28.455  26.815  1.00 21.51           C
ATOM   3270  O   HIS B 194      62.162  27.330  26.922  1.00 21.28           O
ATOM   3271  CB  HIS B 194      61.348  28.839  29.278  1.00 22.22           C
ATOM   3272  CG  HIS B 194      61.278  29.806  30.420  1.00 22.90           C
ATOM   3273  ND1 HIS B 194      62.286  30.703  30.701  1.00 23.67           N
ATOM   3274  CE1 HIS B 194      61.950  31.426  31.754  1.00 23.97           C
ATOM   3275  NE2 HIS B 194      60.760  31.028  32.169  1.00 24.36           N
ATOM   3276  CD2 HIS B 194      60.317  30.017  31.350  1.00 23.54           C
ATOM   3277  N   ARG B 195      61.007  28.864  25.730  1.00 21.22           N
ATOM   3278  CA  ARG B 195      60.785  28.018  24.547  1.00 20.95           C
ATOM   3279  C   ARG B 195      60.075  26.692  24.863  1.00 20.83           C
ATOM   3280  O   ARG B 195      60.388  25.652  24.270  1.00 20.76           O
ATOM   3281  CB  ARG B 195      62.097  27.769  23.785  1.00 20.95           C
ATOM   3282  CG  ARG B 195      62.869  29.026  23.414  1.00 20.97           C
ATOM   3283  CD  ARG B 195      64.382  28.853  23.432  1.00 20.99           C
ATOM   3284  N   ILE B 196      59.121  26.739  25.793  1.00 20.45           N
ATOM   3285  CA  ILE B 196      58.351  25.559  26.183  1.00 20.11           C
ATOM   3286  C   ILE B 196      56.993  25.551  25.484  1.00 19.80           C
ATOM   3287  O   ILE B 196      56.243  26.527  25.540  1.00 19.93           O
ATOM   3288  CB  ILE B 196      58.212  25.464  27.734  1.00 20.35           C
ATOM   3289  CG1 ILE B 196      59.547  25.040  28.363  1.00 20.33           C
ATOM   3290  CD1 ILE B 196      59.748  25.504  29.792  1.00 20.50           C
ATOM   3291  CG2 ILE B 196      57.118  24.463  28.136  1.00 20.41           C
ATOM   3292  N   TYR B 197      56.695  24.442  24.814  1.00 19.45           N
ATOM   3293  CA  TYR B 197      55.452  24.287  24.066  1.00 18.70           C
ATOM   3294  C   TYR B 197      54.669  23.094  24.592  1.00 18.24           C
ATOM   3295  O   TYR B 197      55.197  21.986  24.680  1.00 18.23           O
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FIG. 4CCC

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ATOM   3296  CB  TYR B 197      55.747  24.098  22.574  1.00 18.72           C
ATOM   3297  CG  TYR B 197      56.388  25.291  21.904  1.00 18.55           C
ATOM   3298  CD1 TYR B 197      55.616  26.225  21.216  1.00 18.24           C
ATOM   3299  CE1 TYR B 197      56.198  27.319  20.591  1.00 18.10           C
ATOM   3300  CZ  TYR B 197      57.570  27.490  20.648  1.00 18.50           C
ATOM   3301  OH  TYR B 197      58.148  28.575  20.030  1.00 19.03           O
ATOM   3302  CE2 TYR B 197      58.363  26.577  21.320  1.00 18.66           C
ATOM   3303  CD2 TYR B 197      57.770  25.480  21.942  1.00 18.69           C
ATOM   3304  N   THR B 198      53.410  23.331  24.946  1.00 17.98           N
ATOM   3305  CA  THR B 198      52.532  22.294  25.490  1.00 17.80           C
ATOM   3306  C   THR B 198      51.153  22.399  24.855  1.00 17.59           C
ATOM   3307  O   THR B 198      50.941  23.221  23.964  1.00 17.78           O
ATOM   3308  CB  THR B 198      52.399  22.437  27.023  1.00 17.82           C
ATOM   3309  OG1 THR B 198      52.101  23.799  27.350  1.00 17.96           O
ATOM   3310  CG2 THR B 198      53.731  22.166  27.732  1.00 17.76           C
ATOM   3311  N   HIS B 199      50.219  21.567  25.316  1.00 17.36           N
ATOM   3312  CA  HIS B 199      48.819  21.664  24.906  1.00 17.22           C
ATOM   3313  C   HIS B 199      48.213  22.963  25.426  1.00 17.24           C
ATOM   3314  O   HIS B 199      47.380  23.575  24.758  1.00 16.92           O
ATOM   3315  CB  HIS B 199      48.005  20.479  25.428  1.00 17.04           C
ATOM   3316  CG  HIS B 199      48.575  19.143  25.067  1.00 16.91           C
ATOM   3317  ND1 HIS B 199      48.692  18.710  23.764  1.00 16.53           N
ATOM   3318  CE1 HIS B 199      49.220  17.499  23.751  1.00 16.36           C
ATOM   3319  NE2 HIS B 199      49.445  17.130  25.000  1.00 16.26           N
ATOM   3320  CD2 HIS B 199      49.050  18.140  25.842  1.00 16.15           C
ATOM   3321  N   GLN B 200      48.646  23.366  26.622  1.00 17.27           N
ATOM   3322  CA  GLN B 200      48.206  24.609  27.256  1.00 17.28           C
ATOM   3323  C   GLN B 200      48.854  25.854  26.646  1.00 17.15           C
ATOM   3324  O   GLN B 200      48.337  26.961  26.793  1.00 17.20           O
ATOM   3325  CB  GLN B 200      48.452  24.558  28.766  1.00 17.38           C
ATOM   3326  CG  GLN B 200      47.551  23.572  29.509  1.00 17.51           C
ATOM   3327  CD  GLN B 200      46.077  23.760  29.184  1.00 17.43           C
ATOM   3328  OE1 GLN B 200      45.513  23.019  28.373  1.00 16.85           O
ATOM   3329  NE2 GLN B 200      45.453  24.750  29.814  1.00 17.27           N
ATOM   3330  N   SER B 201      49.984  25.666  25.970  1.00 17.06           N
ATOM   3331  CA  SER B 201      50.580  26.722  25.156  1.00 17.03           C
ATOM   3332  C   SER B 201      49.790  26.896  23.859  1.00 16.80           C
ATOM   3333  O   SER B 201      49.717  27.998  23.313  1.00 16.57           O
ATOM   3334  CB  SER B 201      52.042  26.408  24.842  1.00 17.04           C
ATOM   3335  OG  SER B 201      52.670  27.514  24.215  1.00 17.75           O
ATOM   3336  N   ASP B 202      49.207  25.799  23.376  1.00 16.59           N
ATOM   3337  CA  ASP B 202      48.321  25.820  22.215  1.00 16.53           C
ATOM   3338  C   ASP B 202      46.986  26.495  22.535  1.00 16.38           C
ATOM   3339  O   ASP B 202      46.330  27.026  21.636  1.00 16.51           O
ATOM   3340  CB  ASP B 202      48.066  24.399  21.698  1.00 16.49           C
ATOM   3341  CG  ASP B 202      49.124  23.924  20.714  1.00 16.64           C
ATOM   3342  OD1 ASP B 202      49.210  22.693  20.496  1.00 16.58           O
ATOM   3343  OD2 ASP B 202      49.906  24.693  20.108  1.00 16.43           O
ATOM   3344  N   VAL B 203      46.585  26.461  23.807  1.00 16.20           N
ATOM   3345  CA  VAL B 203      45.360  27.131  24.255  1.00 16.45           C
ATOM   3346  C   VAL B 203      45.518  28.652  24.153  1.00 16.45           C
ATOM   3347  O   VAL B 203      44.583  29.352  23.766  1.00 16.60           O
ATOM   3348  CB  VAL B 203      44.933  26.712  25.699  1.00 16.39           C
ATOM   3349  CG1 VAL B 203      43.676  27.451  26.136  1.00 16.30           C
ATOM   3350  CG2 VAL B 203      44.685  25.209  25.786  1.00 16.35           C
ATOM   3351  N   TRP B 204      46.708  29.147  24.491  1.00 16.36           N
ATOM   3352  CA  TRP B 204      47.040  30.561  24.347  1.00 16.46           C
ATOM   3353  C   TRP B 204      46.851  31.022  22.903  1.00 16.47           C
ATOM   3354  O   TRP B 204      46.183  32.030  22.652  1.00 16.51           O
ATOM   3355  CB  TRP B 204      48.479  30.821  24.799  1.00 16.57           C
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FIG. 4DDD

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ATOM   3356  CG  TRP B 204      48.858  32.281  24.865  1.00 16.80           C
ATOM   3357  CD1 TRP B 204      48.956  33.158  23.817  1.00 16.53           C
ATOM   3358  NE1 TRP B 204      49.332  34.400  24.270  1.00 16.41           N
ATOM   3359  CE2 TRP B 204      49.492  34.350  25.629  1.00 16.34           C
ATOM   3360  CD2 TRP B 204      49.200  33.028  26.040  1.00 16.56           C
ATOM   3361  CE3 TRP B 204      49.294  32.714  27.402  1.00 16.37           C
ATOM   3362  CZ3 TRP B 204      49.669  33.717  28.299  1.00 16.86           C
ATOM   3363  CH2 TRP B 204      49.948  35.021  27.855  1.00 16.31           C
ATOM   3364  CZ2 TRP B 204      49.865  35.355  26.528  1.00 16.24           C
ATOM   3365  N   SER B 205      47.438  30.275  21.965  1.00 16.22           N
ATOM   3366  CA  SER B 205      47.342  30.578  20.534  1.00 15.80           C
ATOM   3367  C   SER B 205      45.903  30.507  20.035  1.00 15.55           C
ATOM   3368  O   SER B 205      45.511  31.285  19.165  1.00 15.61           O
ATOM   3369  CB  SER B 205      48.224  29.635  19.714  1.00 15.70           C
ATOM   3370  OG  SER B 205      49.559  29.641  20.181  1.00 15.55           O
ATOM   3371  N   TYR B 206      45.129  29.571  20.588  1.00 15.07           N
ATOM   3372  CA  TYR B 206      43.699  29.467  20.309  1.00 14.61           C
ATOM   3373  C   TYR B 206      42.976  30.733  20.767  1.00 14.76           C
ATOM   3374  O   TYR B 206      42.007  31.159  20.143  1.00 15.07           O
ATOM   3375  CB  TYR B 206      43.105  28.223  20.986  1.00 14.35           C
ATOM   3376  CG  TYR B 206      41.600  28.072  20.835  1.00 13.49           C
ATOM   3377  CD1 TYR B 206      40.733  28.424  21.871  1.00 12.79           C
ATOM   3378  CE1 TYR B 206      39.348  28.288  21.734  1.00 12.20           C
ATOM   3379  CZ  TYR B 206      38.825  27.794  20.550  1.00 11.90           C
ATOM   3380  OH  TYR B 206      37.467  27.651  20.399  1.00 10.89           O
ATOM   3381  CE2 TYR B 206      39.665  27.435  19.512  1.00 12.25           C
ATOM   3382  CD2 TYR B 206      41.045  27.574  19.659  1.00 12.84           C
ATOM   3383  N   GLY B 207      43.456  31.330  21.856  1.00 14.75           N
ATOM   3384  CA  GLY B 207      42.922  32.587  22.347  1.00 15.01           C
ATOM   3385  C   GLY B 207      43.105  33.715  21.347  1.00 15.01           C
ATOM   3386  O   GLY B 207      42.144  34.405  20.999  1.00 15.06           O
ATOM   3387  N   VAL B 208      44.339  33.891  20.882  1.00 15.03           N
ATOM   3388  CA  VAL B 208      44.664  34.892  19.864  1.00 15.14           C
ATOM   3389  C   VAL B 208      43.905  34.632  18.559  1.00 15.22           C
ATOM   3390  O   VAL B 208      43.474  35.574  17.893  1.00 15.27           O
ATOM   3391  CB  VAL B 208      46.189  34.962  19.593  1.00 15.17           C
ATOM   3392  CG1 VAL B 208      46.527  36.111  18.649  1.00 15.05           C
ATOM   3393  CG2 VAL B 208      46.965  35.102  20.903  1.00 15.18           C
ATOM   3394  N   THR B 209      43.734  33.353  18.220  1.00 15.32           N
ATOM   3395  CA  THR B 209      43.005  32.934  17.020  1.00 15.51           C
ATOM   3396  C   THR B 209      41.534  33.362  17.054  1.00 15.77           C
ATOM   3397  O   THR B 209      41.041  33.969  16.100  1.00 15.74           O
ATOM   3398  CB  THR B 209      43.125  31.405  16.820  1.00 15.39           C
ATOM   3399  OG1 THR B 209      44.509  31.045  16.726  1.00 15.35           O
ATOM   3400  CG2 THR B 209      42.566  30.986  15.468  1.00 15.10           C
ATOM   3401  N   VAL B 210      40.851  33.039  18.152  1.00 15.93           N
ATOM   3402  CA  VAL B 210      39.464  33.445  18.378  1.00 16.36           C
ATOM   3403  C   VAL B 210      39.339  34.974  18.345  1.00 16.58           C
ATOM   3404  O   VAL B 210      38.386  35.517  17.781  1.00 16.56           O
ATOM   3405  CB  VAL B 210      38.931  32.880  19.724  1.00 16.51           C
ATOM   3406  CG1 VAL B 210      37.569  33.472  20.088  1.00 16.71           C
ATOM   3407  CG2 VAL B 210      38.849  31.360  19.673  1.00 16.77           C
ATOM   3408  N   TRP B 211      40.317  35.655  18.938  1.00 16.78           N
ATOM   3409  CA  TRP B 211      40.376  37.113  18.938  1.00 17.07           C
ATOM   3410  C   TRP B 211      40.483  37.664  17.514  1.00 17.46           C
ATOM   3411  O   TRP B 211      39.771  38.603  17.158  1.00 17.73           O
ATOM   3412  CB  TRP B 211      41.544  37.597  19.806  1.00 16.78           C
ATOM   3413  CG  TRP B 211      41.634  39.088  19.961  1.00 16.05           C
ATOM   3414  CD1 TRP B 211      41.085  39.843  20.956  1.00 15.56           C
ATOM   3415  NE1 TRP B 211      41.391  41.170  20.769  1.00 15.38           N
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FIG. 4EEE

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ATOM   3416  CE2 TRP B 211      42.154  41.297  19.638  1.00 15.41           C
ATOM   3417  CD2 TRP B 211      42.329  40.002  19.103  1.00 15.73           C
ATOM   3418  CE3 TRP B 211      43.084  39.859  17.928  1.00 15.47           C
ATOM   3419  CZ3 TRP B 211      43.628  40.994  17.337  1.00 15.46           C
ATOM   3420  CH2 TRP B 211      43.435  42.268  17.898  1.00 15.36           C
ATOM   3421  CZ2 TRP B 211      42.701  42.440  19.043  1.00 15.19           C
ATOM   3422  N   GLU B 212      41.365  37.070  16.711  1.00 17.88           N
ATOM   3423  CA  GLU B 212      41.521  37.431  15.301  1.00 18.08           C
ATOM   3424  C   GLU B 212      40.186  37.363  14.560  1.00 18.48           C
ATOM   3425  O   GLU B 212      39.845  38.269  13.801  1.00 18.56           O
ATOM   3426  CB  GLU B 212      42.512  36.488  14.617  1.00 18.02           C
ATOM   3427  CG  GLU B 212      43.980  36.819  14.803  1.00 17.42           C
ATOM   3428  CD  GLU B 212      44.875  35.756  14.194  1.00 17.22           C
ATOM   3429  OE1 GLU B 212      45.429  36.000  13.103  1.00 17.17           O
ATOM   3430  OE2 GLU B 212      45.016  34.670  14.796  1.00 17.09           O
ATOM   3431  N   LEU B 213      39.441  36.284  14.792  1.00 19.08           N
ATOM   3432  CA  LEU B 213      38.147  36.063  14.146  1.00 19.63           C
ATOM   3433  C   LEU B 213      37.109  37.105  14.564  1.00 19.93           C
ATOM   3434  O   LEU B 213      36.415  37.670  13.718  1.00 19.77           O
ATOM   3435  CB  LEU B 213      37.629  34.646  14.438  1.00 19.47           C
ATOM   3436  CG  LEU B 213      38.499  33.442  14.049  1.00 19.47           C
ATOM   3437  CD1 LEU B 213      37.819  32.133  14.436  1.00 19.58           C
ATOM   3438  CD2 LEU B 213      38.855  33.443  12.567  1.00 19.23           C
ATOM   3439  N   MET B 214      37.027  37.359  15.869  1.00 20.48           N
ATOM   3440  CA  MET B 214      36.051  38.290  16.438  1.00 20.92           C
ATOM   3441  C   MET B 214      36.315  39.747  16.046  1.00 21.06           C
ATOM   3442  O   MET B 214      35.396  40.566  16.015  1.00 21.08           O
ATOM   3443  CB  MET B 214      36.008  38.151  17.963  1.00 21.01           C
ATOM   3444  CG  MET B 214      35.669  36.750  18.460  1.00 21.37           C
ATOM   3445  SD  MET B 214      33.983  36.252  18.092  1.00 22.53           S
ATOM   3446  CE  MET B 214      34.060  34.474  18.422  1.00 22.44           C
ATOM   3447  N   THR B 215      37.574  40.059  15.753  1.00 21.29           N
ATOM   3448  CA  THR B 215      37.959  41.395  15.304  1.00 21.55           C
ATOM   3449  C   THR B 215      38.001  41.468  13.775  1.00 21.77           C
ATOM   3450  O   THR B 215      38.497  42.443  13.202  1.00 21.86           O
ATOM   3451  CB  THR B 215      39.321  41.794  15.901  1.00 21.49           C
ATOM   3452  OG1 THR B 215      40.259  40.729  15.709  1.00 21.62           O
ATOM   3453  CG2 THR B 215      39.233  41.933  17.415  1.00 21.04           C
ATOM   3454  N   PHE B 216      37.473  40.423  13.135  1.00 21.97           N
ATOM   3455  CA  PHE B 216      37.373  40.306  11.674  1.00 22.06           C
ATOM   3456  C   PHE B 216      38.714  40.402  10.930  1.00 22.12           C
ATOM   3457  O   PHE B 216      38.783  40.927   9.815  1.00 21.87           O
ATOM   3458  CB  PHE B 216      36.329  41.282  11.107  1.00 22.02           C
ATOM   3459  CG  PHE B 216      34.921  40.995  11.559  1.00 21.79           C
ATOM   3460  CD1 PHE B 216      34.211  39.916  11.035  1.00 21.82           C
ATOM   3461  CE1 PHE B 216      32.908  39.649  11.449  1.00 21.43           C
ATOM   3462  CZ  PHE B 216      32.305  40.467  12.399  1.00 21.50           C
ATOM   3463  CE2 PHE B 216      33.006  41.547  12.929  1.00 21.19           C
ATOM   3464  CD2 PHE B 216      34.304  41.805  12.508  1.00 21.41           C
ATOM   3465  N   GLY B 217      39.770  39.895  11.563  1.00 22.38           N
ATOM   3466  CA  GLY B 217      41.086  39.819  10.951  1.00 22.88           C
ATOM   3467  C   GLY B 217      42.090  40.880  11.374  1.00 23.14           C
ATOM   3468  O   GLY B 217      43.111  41.058  10.710  1.00 23.01           O
ATOM   3469  N   SER B 218      41.808  41.578  12.473  1.00 23.62           N
ATOM   3470  CA  SER B 218      42.713  42.598  13.008  1.00 24.15           C
ATOM   3471  C   SER B 218      44.036  41.995  13.458  1.00 24.33           C
ATOM   3472  O   SER B 218      44.075  40.876  13.974  1.00 24.36           O
ATOM   3473  CB  SER B 218      42.071  43.342  14.182  1.00 24.10           C
ATOM   3474  OG  SER B 218      40.835  43.924  13.808  1.00 24.72           O
ATOM   3475  N   LYS B 219      45.112  42.748  13.254  1.00 24.82           N
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FIG. 4FFF

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ATOM   3476  CA  LYS B 219      46.447  42.331  13.665  1.00 25.33           C
ATOM   3477  C   LYS B 219      46.596  42.460  15.182  1.00 25.79           C
ATOM   3478  O   LYS B 219      46.294  43.517  15.749  1.00 25.77           O
ATOM   3479  CB  LYS B 219      47.517  43.159  12.949  1.00 25.30           C
ATOM   3480  CG  LYS B 219      47.636  42.877  11.456  1.00 25.43           C
ATOM   3481  CD  LYS B 219      47.908  44.151  10.665  1.00 25.36           C
ATOM   3482  N   PRO B 220      47.033  41.381  15.838  1.00 26.26           N
ATOM   3483  CA  PRO B 220      47.246  41.382  17.293  1.00 26.66           C
ATOM   3484  C   PRO B 220      48.379  42.317  17.699  1.00 27.09           C
ATOM   3485  O   PRO B 220      49.442  42.282  17.076  1.00 27.18           O
ATOM   3486  CB  PRO B 220      47.626  39.927  17.593  1.00 26.49           C
ATOM   3487  CG  PRO B 220      47.151  39.160  16.412  1.00 26.47           C
ATOM   3488  CD  PRO B 220      47.342  40.070  15.240  1.00 26.18           C
ATOM   3489  N   TYR B 221      48.145  43.136  18.725  1.00 27.68           N
ATOM   3490  CA  TYR B 221      49.111  44.142  19.177  1.00 28.26           C
ATOM   3491  C   TYR B 221      49.620  44.945  17.976  1.00 28.85           C
ATOM   3492  O   TYR B 221      50.804  44.888  17.630  1.00 28.85           O
ATOM   3493  CB  TYR B 221      50.277  43.498  19.945  1.00 28.09           C
ATOM   3494  CG  TYR B 221      49.887  42.376  20.889  1.00 27.77           C
ATOM   3495  CD1 TYR B 221      49.532  42.642  22.211  1.00 27.47           C
ATOM   3496  CE1 TYR B 221      49.182  41.612  23.083  1.00 27.38           C
ATOM   3497  CZ  TYR B 221      49.191  40.299  22.631  1.00 27.18           C
ATOM   3498  OH  TYR B 221      48.844  39.276  23.484  1.00 26.85           O
ATOM   3499  CE2 TYR B 221      49.544  40.011  21.324  1.00 27.01           C
ATOM   3500  CD2 TYR B 221      49.894  41.045  20.464  1.00 27.41           C
ATOM   3501  N   ASP B 222      48.701  45.686  17.357  1.00 29.68           N
ATOM   3502  CA  ASP B 222      48.901  46.307  16.043  1.00 30.48           C
ATOM   3503  C   ASP B 222      50.326  46.766  15.730  1.00 31.14           C
ATOM   3504  O   ASP B 222      51.008  46.158  14.898  1.00 31.16           O
ATOM   3505  CB  ASP B 222      47.911  47.455  15.829  1.00 30.52           C
ATOM   3506  CG  ASP B 222      47.534  47.634  14.369  1.00 30.61           C
ATOM   3507  OD1 ASP B 222      48.443  47.744  13.519  1.00 30.55           O
ATOM   3508  OD2 ASP B 222      46.350  47.681  13.977  1.00 31.30           O
ATOM   3509  N   GLY B 223      50.761  47.838  16.390  1.00 31.67           N
ATOM   3510  CA  GLY B 223      52.038  48.460  16.086  1.00 32.55           C
ATOM   3511  C   GLY B 223      53.112  48.272  17.140  1.00 33.14           C
ATOM   3512  O   GLY B 223      54.102  49.006  17.155  1.00 33.45           O
ATOM   3513  N   ILE B 224      52.917  47.293  18.020  1.00 33.50           N
ATOM   3514  CA  ILE B 224      53.894  46.978  19.058  1.00 33.95           C
ATOM   3515  C   ILE B 224      54.982  46.066  18.482  1.00 34.34           C
ATOM   3516  O   ILE B 224      54.667  45.044  17.872  1.00 34.44           O
ATOM   3517  CB  ILE B 224      53.202  46.301  20.277  1.00 33.94           C
ATOM   3518  CG1 ILE B 224      51.889  47.015  20.657  1.00 34.10           C
ATOM   3519  CD1 ILE B 224      52.038  48.421  21.246  1.00 34.20           C
ATOM   3520  CG2 ILE B 224      54.168  46.169  21.464  1.00 33.93           C
ATOM   3521  N   PRO B 225      56.252  46.443  18.650  1.00 34.74           N
ATOM   3522  CA  PRO B 225      57.378  45.577  18.269  1.00 34.92           C
ATOM   3523  C   PRO B 225      57.420  44.292  19.093  1.00 35.07           C
ATOM   3524  O   PRO B 225      57.064  44.309  20.272  1.00 35.07           O
ATOM   3525  CB  PRO B 225      58.604  46.441  18.581  1.00 34.88           C
ATOM   3526  CG  PRO B 225      58.088  47.837  18.589  1.00 34.90           C
ATOM   3527  CD  PRO B 225      56.718  47.737  19.183  1.00 34.86           C
ATOM   3528  N   ALA B 226      57.863  43.201  18.470  1.00 35.36           N
ATOM   3529  CA  ALA B 226      57.872  41.876  19.098  1.00 35.42           C
ATOM   3530  C   ALA B 226      58.869  41.741  20.257  1.00 35.54           C
ATOM   3531  O   ALA B 226      58.947  40.690  20.898  1.00 35.78           O
ATOM   3532  CB  ALA B 226      58.120  40.800  18.049  1.00 35.24           C
ATOM   3533  N   SER B 227      59.619  42.807  20.520  1.00 35.60           N
ATOM   3534  CA  SER B 227      60.585  42.836  21.617  1.00 35.62           C
ATOM   3535  C   SER B 227      59.936  43.240  22.944  1.00 35.64           C
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FIG. 4GGG

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ATOM   3536  O   SER B 227      60.443  42.908  24.019  1.00 35.51           O
ATOM   3537  CB  SER B 227      61.739  43.786  21.287  1.00 35.69           C
ATOM   3538  OG  SER B 227      61.760  44.119  19.908  1.00 35.66           O
ATOM   3539  N   GLU B 228      58.806  43.939  22.854  1.00 35.65           N
ATOM   3540  CA  GLU B 228      58.122  44.493  24.022  1.00 35.68           C
ATOM   3541  C   GLU B 228      56.942  43.655  24.525  1.00 35.68           C
ATOM   3542  O   GLU B 228      56.374  43.952  25.580  1.00 35.55           O
ATOM   3543  CB  GLU B 228      57.651  45.919  23.718  1.00 35.71           C
ATOM   3544  N   ILE B 229      56.590  42.608  23.779  1.00 35.78           N
ATOM   3545  CA  ILE B 229      55.410  41.787  24.074  1.00 35.74           C
ATOM   3546  C   ILE B 229      55.489  41.090  25.434  1.00 35.72           C
ATOM   3547  O   ILE B 229      54.503  41.062  26.174  1.00 35.73           O
ATOM   3548  CB  ILE B 229      55.145  40.754  22.932  1.00 35.77           C
ATOM   3549  CG1 ILE B 229      55.077  41.442  21.557  1.00 35.58           C
ATOM   3550  CD1 ILE B 229      53.839  42.312  21.316  1.00 35.50           C
ATOM   3551  CG2 ILE B 229      53.884  39.918  23.214  1.00 35.73           C
ATOM   3552  N   SER B 230      56.660  40.545  25.760  1.00 35.78           N
ATOM   3553  CA  SER B 230      56.864  39.820  27.018  1.00 35.82           C
ATOM   3554  C   SER B 230      56.654  40.683  28.266  1.00 35.82           C
ATOM   3555  O   SER B 230      56.065  40.225  29.245  1.00 35.86           O
ATOM   3556  CB  SER B 230      58.244  39.154  27.050  1.00 35.84           C
ATOM   3557  OG  SER B 230      59.286  40.115  27.044  1.00 36.16           O
ATOM   3558  N   SER B 231      57.131  41.926  28.221  1.00 35.87           N
ATOM   3559  CA  SER B 231      56.965  42.860  29.339  1.00 35.96           C
ATOM   3560  C   SER B 231      55.520  43.353  29.461  1.00 35.89           C
ATOM   3561  O   SER B 231      55.017  43.544  30.571  1.00 35.77           O
ATOM   3562  CB  SER B 231      57.935  44.040  29.221  1.00 35.94           C
ATOM   3563  OG  SER B 231      57.689  44.795  28.051  1.00 36.04           O
ATOM   3564  N   ILE B 232      54.863  43.546  28.318  1.00 35.79           N
ATOM   3565  CA  ILE B 232      53.441  43.887  28.283  1.00 35.86           C
ATOM   3566  C   ILE B 232      52.573  42.777  28.885  1.00 35.90           C
ATOM   3567  O   ILE B 232      51.584  43.058  29.567  1.00 36.04           O
ATOM   3568  CB  ILE B 232      52.987  44.201  26.841  1.00 35.90           C
ATOM   3569  N   LEU B 233      52.952  41.523  28.640  1.00 35.72           N
ATOM   3570  CA  LEU B 233      52.237  40.381  29.206  1.00 35.69           C
ATOM   3571  C   LEU B 233      52.535  40.203  30.692  1.00 35.77           C
ATOM   3572  O   LEU B 233      51.651  39.830  31.467  1.00 35.85           O
ATOM   3573  CB  LEU B 233      52.559  39.091  28.442  1.00 35.73           C
ATOM   3574  CG  LEU B 233      52.033  38.944  27.008  1.00 35.60           C
ATOM   3575  CD1 LEU B 233      52.645  37.725  26.344  1.00 35.37           C
ATOM   3576  CD2 LEU B 233      50.510  38.882  26.963  1.00 35.43           C
ATOM   3577  N   GLU B 234      53.781  40.474  31.080  1.00 35.90           N
ATOM   3578  CA  GLU B 234      54.212  40.384  32.477  1.00 35.83           C
ATOM   3579  C   GLU B 234      53.594  41.482  33.341  1.00 35.52           C
ATOM   3580  O   GLU B 234      53.462  41.321  34.556  1.00 35.50           O
ATOM   3581  CB  GLU B 234      55.739  40.430  32.577  1.00 36.07           C
ATOM   3582  CG  GLU B 234      56.412  39.075  32.403  1.00 36.80           C
ATOM   3583  CD  GLU B 234      57.862  39.177  31.958  1.00 37.64           C
ATOM   3584  OE1 GLU B 234      58.230  40.180  31.305  1.00 37.96           O
ATOM   3585  OE2 GLU B 234      58.639  38.243  32.259  1.00 37.97           O
ATOM   3586  N   LYS B 235      53.221  42.593  32.706  1.00 35.08           N
ATOM   3587  CA  LYS B 235      52.548  43.696  33.388  1.00 34.61           C
ATOM   3588  C   LYS B 235      51.063  43.411  33.611  1.00 34.24           C
ATOM   3589  O   LYS B 235      50.432  44.014  34.483  1.00 34.52           O
ATOM   3590  CB  LYS B 235      52.726  45.001  32.607  1.00 34.66           C
ATOM   3591  CG  LYS B 235      53.332  46.134  33.424  1.00 34.98           C
ATOM   3592  CD  LYS B 235      54.856  46.200  33.279  1.00 34.96           C
ATOM   3593  CE  LYS B 235      55.578  45.553  34.464  1.00 35.12           C
ATOM   3594  NZ  LYS B 235      55.184  46.119  35.793  1.00 34.75           N
ATOM   3595  N   GLY B 236      50.513  42.493  32.820  1.00 33.54           N
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FIG. 4HHH

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ATOM   3596  CA  GLY B 236      49.120  42.105  32.943  1.00 32.71           C
ATOM   3597  C   GLY B 236      48.246  42.638  31.826  1.00 32.27           C
ATOM   3598  O   GLY B 236      47.019  42.584  31.917  1.00 32.22           O
ATOM   3599  N   GLU B 237      48.877  43.154  30.772  1.00 31.81           N
ATOM   3600  CA  GLU B 237      48.150  43.679  29.621  1.00 31.22           C
ATOM   3601  C   GLU B 237      47.862  42.578  28.605  1.00 30.80           C
ATOM   3602  O   GLU B 237      48.762  41.848  28.180  1.00 30.55           O
ATOM   3603  CB  GLU B 237      48.914  44.833  28.965  1.00 31.35           C
ATOM   3604  N   ARG B 238      46.593  42.469  28.230  1.00 30.23           N
ATOM   3605  CA  ARG B 238      46.142  41.467  27.275  1.00 29.51           C
ATOM   3606  C   ARG B 238      45.619  42.145  26.016  1.00 29.05           C
ATOM   3607  O   ARG B 238      45.655  43.374  25.909  1.00 29.03           O
ATOM   3608  CB  ARG B 238      45.059  40.587  27.911  1.00 29.53           C
ATOM   3609  CG  ARG B 238      45.572  39.661  29.009  1.00 29.53           C
ATOM   3610  CD  ARG B 238      46.682  38.722  28.553  1.00 29.54           C
ATOM   3611  NE  ARG B 238      47.386  38.081  29.662  1.00 29.35           N
ATOM   3612  CZ  ARG B 238      48.448  38.588  30.280  1.00 29.15           C
ATOM   3613  NH1 ARG B 238      49.016  37.917  31.271  1.00 29.29           N
ATOM   3614  NH2 ARG B 238      48.942  39.764  29.921  1.00 28.79           N
ATOM   3615  N   LEU B 239      45.153  41.341  25.061  1.00 28.36           N
ATOM   3616  CA  LEU B 239      44.513  41.859  23.855  1.00 27.69           C
ATOM   3617  C   LEU B 239      43.159  42.462  24.219  1.00 27.28           C
ATOM   3618  O   LEU B 239      42.451  41.915  25.065  1.00 27.37           O
ATOM   3619  CB  LEU B 239      44.342  40.750  22.814  1.00 27.61           C
ATOM   3620  CG  LEU B 239      45.575  40.346  22.001  1.00 27.34           C
ATOM   3621  CD1 LEU B 239      45.458  38.901  21.535  1.00 27.11           C
ATOM   3622  CD2 LEU B 239      45.788  41.277  20.817  1.00 26.93           C
ATOM   3623  N   PRO B 240      42.801  43.586  23.593  1.00 26.91           N
ATOM   3624  CA  PRO B 240      41.571  44.308  23.945  1.00 26.60           C
ATOM   3625  C   PRO B 240      40.304  43.538  23.588  1.00 26.38           C
ATOM   3626  O   PRO B 240      40.332  42.697  22.688  1.00 26.35           O
ATOM   3627  CB  PRO B 240      41.667  45.588  23.107  1.00 26.56           C
ATOM   3628  CG  PRO B 240      42.535  45.230  21.961  1.00 26.48           C
ATOM   3629  CD  PRO B 240      43.533  44.253  22.500  1.00 26.91           C
ATOM   3630  N   GLN B 241      39.215  43.825  24.298  1.00 26.12           N
ATOM   3631  CA  GLN B 241      37.916  43.221  24.018  1.00 25.84           C
ATOM   3632  C   GLN B 241      37.402  43.664  22.649  1.00 25.72           C
ATOM   3633  O   GLN B 241      37.301  44.864  22.384  1.00 25.98           O
ATOM   3634  CB  GLN B 241      36.905  43.582  25.111  1.00 25.79           C
ATOM   3635  CG  GLN B 241      35.552  42.887  24.977  1.00 25.44           C
ATOM   3636  CD  GLN B 241      34.592  43.211  26.113  1.00 25.15           C
ATOM   3637  OE1 GLN B 241      34.977  43.814  27.114  1.00 24.87           O
ATOM   3638  NE2 GLN B 241      33.338  42.804  25.957  1.00 25.48           N
ATOM   3639  N   PRO B 242      37.102  42.697  21.781  1.00 25.53           N
ATOM   3640  CA  PRO B 242      36.520  42.985  20.463  1.00 25.41           C
ATOM   3641  C   PRO B 242      35.138  43.639  20.569  1.00 25.21           C
ATOM   3642  O   PRO B 242      34.315  43.179  21.362  1.00 24.97           O
ATOM   3643  CB  PRO B 242      36.406  41.597  19.822  1.00 25.42           C
ATOM   3644  CG  PRO B 242      37.384  40.756  20.570  1.00 25.45           C
ATOM   3645  CD  PRO B 242      37.318  41.253  21.980  1.00 25.44           C
ATOM   3646  N   PRO B 243      34.900  44.697  19.790  1.00 25.22           N
ATOM   3647  CA  PRO B 243      33.629  45.435  19.820  1.00 25.23           C
ATOM   3648  C   PRO B 243      32.366  44.575  19.719  1.00 25.20           C
ATOM   3649  O   PRO B 243      31.361  44.968  20.304  1.00 25.32           O
ATOM   3650  CB  PRO B 243      33.738  46.361  18.607  1.00 25.15           C
ATOM   3651  CG  PRO B 243      35.186  46.595  18.462  1.00 25.16           C
ATOM   3652  CD  PRO B 243      35.849  45.294  18.831  1.00 25.26           C
ATOM   3653  N   ILE B 244      32.412  43.446  19.014  1.00 25.18           N
ATOM   3654  CA  ILE B 244      31.235  42.577  18.874  1.00 25.21           C
ATOM   3655  C   ILE B 244      31.034  41.618  20.055  1.00 25.29           C
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FIG. 4III

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ATOM   3656  O   ILE B 244      29.957  41.032  20.209  1.00 25.56           O
ATOM   3657  CB  ILE B 244      31.267  41.774  17.537  1.00 25.23           C
ATOM   3658  CG1 ILE B 244      32.432  40.775  17.517  1.00 25.07           C
ATOM   3659  CD1 ILE B 244      32.108  39.464  16.823  1.00 24.83           C
ATOM   3660  CG2 ILE B 244      31.292  42.713  16.325  1.00 25.08           C
ATOM   3661  N   CYS B 245      32.065  41.475  20.885  1.00 25.13           N
ATOM   3662  CA  CYS B 245      32.097  40.455  21.932  1.00 24.91           C
ATOM   3663  C   CYS B 245      31.433  40.870  23.235  1.00 24.82           C
ATOM   3664  O   CYS B 245      31.682  41.963  23.745  1.00 25.06           O
ATOM   3665  CB  CYS B 245      33.544  40.059  22.232  1.00 24.87           C
ATOM   3666  SG  CYS B 245      34.222  38.824  21.117  1.00 24.95           S
ATOM   3667  N   THR B 246      30.605  39.979  23.777  1.00 24.67           N
ATOM   3668  CA  THR B 246      30.121  40.106  25.154  1.00 24.56           C
ATOM   3669  C   THR B 246      31.246  39.717  26.103  1.00 24.45           C
ATOM   3670  O   THR B 246      32.233  39.108  25.681  1.00 24.60           O
ATOM   3671  CB  THR B 246      28.908  39.190  25.410  1.00 24.47           C
ATOM   3672  OG1 THR B 246      29.211  37.860  24.973  1.00 24.53           O
ATOM   3673  CG2 THR B 246      27.716  39.600  24.553  1.00 24.30           C
ATOM   3674  N   ILE B 247      31.095  40.057  27.383  1.00 24.22           N
ATOM   3675  CA  ILE B 247      32.096  39.704  28.392  1.00 24.03           C
ATOM   3676  C   ILE B 247      32.222  38.182  28.580  1.00 23.94           C
ATOM   3677  O   ILE B 247      33.278  37.689  28.974  1.00 23.84           O
ATOM   3678  CB  ILE B 247      31.844  40.461  29.734  1.00 23.96           C
ATOM   3679  CG1 ILE B 247      33.084  40.407  30.633  1.00 24.08           C
ATOM   3680  CD1 ILE B 247      33.890  41.685  30.652  1.00 24.75           C
ATOM   3681  CG2 ILE B 247      30.603  39.932  30.463  1.00 24.05           C
ATOM   3682  N   ASP B 248      31.147  37.455  28.268  1.00 23.94           N
ATOM   3683  CA  ASP B 248      31.139  35.991  28.286  1.00 23.92           C
ATOM   3684  C   ASP B 248      32.221  35.417  27.369  1.00 24.01           C
ATOM   3685  O   ASP B 248      33.051  34.619  27.806  1.00 24.07           O
ATOM   3686  CB  ASP B 248      29.769  35.447  27.861  1.00 23.91           C
ATOM   3687  CG  ASP B 248      28.609  36.160  28.537  1.00 24.03           C
ATOM   3688  OD1 ASP B 248      28.381  37.355  28.245  1.00 23.78           O
ATOM   3689  OD2 ASP B 248      27.861  35.598  29.365  1.00 24.27           O
ATOM   3690  N   VAL B 249      32.206  35.836  26.104  1.00 24.12           N
ATOM   3691  CA  VAL B 249      33.174  35.369  25.108  1.00 24.25           C
ATOM   3692  C   VAL B 249      34.576  35.929  25.378  1.00 24.44           C
ATOM   3693  O   VAL B 249      35.574  35.223  25.199  1.00 24.79           O
ATOM   3694  CB  VAL B 249      32.723  35.695  23.650  1.00 24.18           C
ATOM   3695  CG1 VAL B 249      33.731  35.177  22.635  1.00 23.89           C
ATOM   3696  CG2 VAL B 249      31.350  35.099  23.358  1.00 23.95           C
ATOM   3697  N   TYR B 250      34.647  37.186  25.816  1.00 24.26           N
ATOM   3698  CA  TYR B 250      35.929  37.817  26.126  1.00 24.14           C
ATOM   3699  C   TYR B 250      36.645  37.172  27.319  1.00 24.25           C
ATOM   3700  O   TYR B 250      37.872  37.081  27.330  1.00 24.26           O
ATOM   3701  CB  TYR B 250      35.770  39.326  26.345  1.00 23.90           C
ATOM   3702  CG  TYR B 250      37.084  40.050  26.576  1.00 23.47           C
ATOM   3703  CD1 TYR B 250      37.255  40.887  27.678  1.00 23.11           C
ATOM   3704  CE1 TYR B 250      38.462  41.549  27.899  1.00 22.88           C
ATOM   3705  CZ  TYR B 250      39.511  41.375  27.009  1.00 22.92           C
ATOM   3706  OH  TYR B 250      40.705  42.026  27.222  1.00 22.75           O
ATOM   3707  CE2 TYR B 250      39.368  40.544  25.909  1.00 22.93           C
ATOM   3708  CD2 TYR B 250      38.159  39.890  25.696  1.00 23.00           C
ATOM   3709  N   MET B 251      35.880  36.719  28.310  1.00 24.41           N
ATOM   3710  CA  MET B 251      36.456  36.053  29.479  1.00 24.57           C
ATOM   3711  C   MET B 251      37.110  34.713  29.148  1.00 24.63           C
ATOM   3712  O   MET B 251      38.071  34.312  29.807  1.00 24.55           O
ATOM   3713  CB  MET B 251      35.417  35.875  30.585  1.00 24.68           C
ATOM   3714  CG  MET B 251      35.901  36.350  31.942  1.00 24.76           C
ATOM   3715  SD  MET B 251      36.242  38.117  31.953  1.00 25.31           S
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FIG. 4JJJ

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ATOM   3716  CE  MET B 251      37.961  38.126  32.390  1.00 24.63           C
ATOM   3717  N   ILE B 252      36.582  34.027  28.135  1.00 24.73           N
ATOM   3718  CA  ILE B 252      37.204  32.813  27.608  1.00 24.72           C
ATOM   3719  C   ILE B 252      38.610  33.137  27.103  1.00 24.59           C
ATOM   3720  O   ILE B 252      39.572  32.452  27.449  1.00 24.57           O
ATOM   3721  CB  ILE B 252      36.335  32.191  26.483  1.00 24.77           C
ATOM   3722  CG1 ILE B 252      35.067  31.564  27.069  1.00 24.97           C
ATOM   3723  CD1 ILE B 252      33.921  31.454  26.081  1.00 25.20           C
ATOM   3724  CG2 ILE B 252      37.120  31.146  25.694  1.00 24.63           C
ATOM   3725  N   MET B 253      38.711  34.201  26.307  1.00 24.61           N
ATOM   3726  CA  MET B 253      39.978  34.652  25.735  1.00 24.61           C
ATOM   3727  C   MET B 253      41.000  35.017  26.814  1.00 24.57           C
ATOM   3728  O   MET B 253      42.156  34.591  26.746  1.00 24.60           O
ATOM   3729  CB  MET B 253      39.749  35.845  24.800  1.00 24.68           C
ATOM   3730  CG  MET B 253      39.200  35.486  23.429  1.00 24.47           C
ATOM   3731  SD  MET B 253      38.876  36.958  22.437  1.00 24.97           S
ATOM   3732  CE  MET B 253      37.146  36.767  22.081  1.00 24.50           C
ATOM   3733  N   VAL B 254      40.562  35.796  27.803  1.00 24.43           N
ATOM   3734  CA  VAL B 254      41.411  36.196  28.928  1.00 24.22           C
ATOM   3735  C   VAL B 254      41.940  34.970  29.672  1.00 24.26           C
ATOM   3736  O   VAL B 254      43.120  34.915  30.026  1.00 24.29           O
ATOM   3737  CB  VAL B 254      40.661  37.149  29.903  1.00 24.23           C
ATOM   3738  CG1 VAL B 254      41.502  37.460  31.141  1.00 23.78           C
ATOM   3739  CG2 VAL B 254      40.265  38.445  29.196  1.00 24.23           C
ATOM   3740  N   LYS B 255      41.064  33.987  29.884  1.00 24.32           N
ATOM   3741  CA  LYS B 255      41.418  32.739  30.561  1.00 24.48           C
ATOM   3742  C   LYS B 255      42.479  31.950  29.799  1.00 24.46           C
ATOM   3743  O   LYS B 255      43.288  31.253  30.405  1.00 24.53           O
ATOM   3744  CB  LYS B 255      40.180  31.866  30.766  1.00 24.59           C
ATOM   3745  CG  LYS B 255      39.359  32.211  31.998  1.00 25.26           C
ATOM   3746  CD  LYS B 255      38.444  31.059  32.392  1.00 25.97           C
ATOM   3747  CE  LYS B 255      37.128  31.102  31.622  1.00 26.83           C
ATOM   3748  NZ  LYS B 255      36.307  29.878  31.845  1.00 27.09           N
ATOM   3749  N   CYS B 256      42.469  32.062  28.471  1.00 24.37           N
ATOM   3750  CA  CYS B 256      43.485  31.423  27.638  1.00 24.31           C
ATOM   3751  C   CYS B 256      44.857  32.097  27.778  1.00 24.28           C
ATOM   3752  O   CYS B 256      45.881  31.490  27.466  1.00 24.08           O
ATOM   3753  CB  CYS B 256      43.049  31.400  26.170  1.00 24.16           C
ATOM   3754  SG  CYS B 256      41.586  30.394  25.828  1.00 24.07           S
ATOM   3755  N   TRP B 257      44.868  33.343  28.253  1.00 24.42           N
ATOM   3756  CA  TRP B 257      46.106  34.122  28.360  1.00 24.78           C
ATOM   3757  C   TRP B 257      46.595  34.340  29.804  1.00 24.89           C
ATOM   3758  O   TRP B 257      47.131  35.399  30.135  1.00 24.88           O
ATOM   3759  CB  TRP B 257      45.969  35.471  27.638  1.00 24.62           C
ATOM   3760  CG  TRP B 257      45.406  35.408  26.242  1.00 24.90           C
ATOM   3761  CD1 TRP B 257      45.695  34.486  25.273  1.00 24.93           C
ATOM   3762  NE1 TRP B 257      44.989  34.764  24.127  1.00 25.14           N
ATOM   3763  CE2 TRP B 257      44.226  35.883  24.332  1.00 25.19           C
ATOM   3764  CD2 TRP B 257      44.469  36.320  25.655  1.00 25.19           C
ATOM   3765  CE3 TRP B 257      43.797  37.464  26.116  1.00 24.95           C
ATOM   3766  CZ3 TRP B 257      42.924  38.123  25.257  1.00 25.02           C
ATOM   3767  CH2 TRP B 257      42.711  37.664  23.946  1.00 24.95           C
ATOM   3768  CZ2 TRP B 257      43.348  36.549  23.468  1.00 25.07           C
ATOM   3769  N   MET B 258      46.421  33.331  30.653  1.00 25.25           N
ATOM   3770  CA  MET B 258      46.883  33.404  32.039  1.00 25.54           C
ATOM   3771  C   MET B 258      48.317  32.896  32.159  1.00 25.63           C
ATOM   3772  O   MET B 258      48.696  31.938  31.482  1.00 25.71           O
ATOM   3773  CB  MET B 258      45.956  32.611  32.965  1.00 25.60           C
ATOM   3774  CG  MET B 258      44.499  33.032  32.887  1.00 25.97           C
ATOM   3775  SD  MET B 258      43.726  33.239  34.491  1.00 26.80           S
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FIG. 4KKK

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ATOM   3776  CE  MET B 258      42.833  34.773  34.239  1.00 26.84           C
ATOM   3777  N   ILE B 259      49.105  33.544  33.018  1.00 25.78           N
ATOM   3778  CA  ILE B 259      50.520  33.200  33.200  1.00 25.96           C
ATOM   3779  C   ILE B 259      50.678  31.740  33.618  1.00 25.96           C
ATOM   3780  O   ILE B 259      51.483  31.006  33.044  1.00 26.06           O
ATOM   3781  CB  ILE B 259      51.212  34.151  34.220  1.00 25.92           C
ATOM   3782  CG1 ILE B 259      50.980  35.628  33.858  1.00 26.17           C
ATOM   3783  CD1 ILE B 259      51.630  36.095  32.551  1.00 26.28           C
ATOM   3784  CG2 ILE B 259      52.706  33.841  34.333  1.00 26.02           C
ATOM   3785  N   ASP B 260      49.898  31.336  34.615  1.00 26.12           N
ATOM   3786  CA  ASP B 260      49.836  29.950  35.052  1.00 26.15           C
ATOM   3787  C   ASP B 260      49.059  29.138  34.019  1.00 26.37           C
ATOM   3788  O   ASP B 260      47.860  29.359  33.811  1.00 26.43           O
ATOM   3789  CB  ASP B 260      49.182  29.863  36.436  1.00 26.04           C
ATOM   3790  CG  ASP B 260      48.973  28.433  36.906  1.00 26.23           C
ATOM   3791  OD1 ASP B 260      47.947  28.177  37.572  1.00 26.35           O
ATOM   3792  OD2 ASP B 260      49.773  27.501  36.669  1.00 26.31           O
ATOM   3793  N   ALA B 261      49.758  28.206  33.372  1.00 26.54           N
ATOM   3794  CA  ALA B 261      49.189  27.369  32.315  1.00 26.58           C
ATOM   3795  C   ALA B 261      48.043  26.484  32.805  1.00 26.73           C
ATOM   3796  O   ALA B 261      47.130  26.160  32.040  1.00 26.72           O
ATOM   3797  CB  ALA B 261      50.275  26.522  31.674  1.00 26.47           C
ATOM   3798  N   ASP B 262      48.100  26.104  34.081  1.00 26.87           N
ATOM   3799  CA  ASP B 262      47.091  25.245  34.701  1.00 26.98           C
ATOM   3800  C   ASP B 262      45.716  25.912  34.766  1.00 26.83           C
ATOM   3801  O   ASP B 262      44.686  25.241  34.653  1.00 27.04           O
ATOM   3802  CB  ASP B 262      47.537  24.834  36.105  1.00 27.19           C
ATOM   3803  CG  ASP B 262      48.790  23.974  36.093  1.00 27.88           C
ATOM   3804  OD1 ASP B 262      49.868  24.480  36.481  1.00 27.90           O
ATOM   3805  OD2 ASP B 262      48.790  22.781  35.714  1.00 28.45           O
ATOM   3806  N   SER B 263      45.712  27.231  34.941  1.00 26.47           N
ATOM   3807  CA  SER B 263      44.480  28.003  35.063  1.00 26.00           C
ATOM   3808  C   SER B 263      43.765  28.202  33.723  1.00 25.73           C
ATOM   3809  O   SER B 263      42.572  28.516  33.695  1.00 25.93           O
ATOM   3810  CB  SER B 263      44.768  29.352  35.722  1.00 26.12           C
ATOM   3811  OG  SER B 263      45.106  29.182  37.090  1.00 26.04           O
ATOM   3812  N   ARG B 264      44.497  28.019  32.624  1.00 25.11           N
ATOM   3813  CA  ARG B 264      43.930  28.092  31.275  1.00 24.40           C
ATOM   3814  C   ARG B 264      42.929  26.958  31.031  1.00 24.16           C
ATOM   3815  O   ARG B 264      43.097  25.862  31.570  1.00 24.04           O
ATOM   3816  CB  ARG B 264      45.037  28.024  30.222  1.00 24.15           C
ATOM   3817  CG  ARG B 264      45.965  29.215  30.195  1.00 23.52           C
ATOM   3818  CD  ARG B 264      47.111  29.068  29.216  1.00 22.50           C
ATOM   3819  NE  ARG B 264      48.246  29.902  29.591  1.00 21.91           N
ATOM   3820  CZ  ARG B 264      49.502  29.661  29.248  1.00 21.59           C
ATOM   3821  NH1 ARG B 264      50.463  30.483  29.645  1.00 21.71           N
ATOM   3822  NH2 ARG B 264      49.804  28.603  28.508  1.00 21.46           N
ATOM   3823  N   PRO B 265      41.895  27.218  30.227  1.00 23.89           N
ATOM   3824  CA  PRO B 265      40.892  26.198  29.897  1.00 23.77           C
ATOM   3825  C   PRO B 265      41.477  25.020  29.123  1.00 23.71           C
ATOM   3826  O   PRO B 265      42.526  25.146  28.486  1.00 23.83           O
ATOM   3827  CB  PRO B 265      39.900  26.954  29.003  1.00 23.74           C
ATOM   3828  CG  PRO B 265      40.136  28.388  29.279  1.00 23.61           C
ATOM   3829  CD  PRO B 265      41.591  28.507  29.579  1.00 23.87           C
ATOM   3830  N   LYS B 266      40.797  23.883  29.192  1.00 23.61           N
ATOM   3831  CA  LYS B 266      41.151  22.722  28.388  1.00 23.45           C
ATOM   3832  C   LYS B 266      40.340  22.762  27.096  1.00 23.38           C
ATOM   3833  O   LYS B 266      39.217  23.277  27.082  1.00 23.33           O
ATOM   3834  CB  LYS B 266      40.870  21.429  29.161  1.00 23.47           C
ATOM   3835  CG  LYS B 266      41.887  21.114  30.249  1.00 23.14           C
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FIG. 4LLL

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ATOM   3836  N   PHE B 267      40.905  22.220  26.018  1.00 23.21           N
ATOM   3837  CA  PHE B 267      40.234  22.219  24.714  1.00 23.23           C
ATOM   3838  C   PHE B 267      38.878  21.510  24.739  1.00 23.35           C
ATOM   3839  O   PHE B 267      37.957  21.897  24.013  1.00 23.52           O
ATOM   3840  CB  PHE B 267      41.134  21.622  23.626  1.00 23.04           C
ATOM   3841  CG  PHE B 267      42.172  22.580  23.102  1.00 22.55           C
ATOM   3842  CD1 PHE B 267      41.797  23.779  22.502  1.00 21.94           C
ATOM   3843  CE1 PHE B 267      42.755  24.669  22.022  1.00 21.64           C
ATOM   3844  CZ  PHE B 267      44.105  24.360  22.136  1.00 21.59           C
ATOM   3845  CE2 PHE B 267      44.494  23.163  22.728  1.00 21.76           C
ATOM   3846  CD2 PHE B 267      43.528  22.280  23.208  1.00 22.15           C
ATOM   3847  N   ARG B 268      38.764  20.479  25.575  1.00 23.30           N
ATOM   3848  CA  ARG B 268      37.503  19.763  25.764  1.00 23.41           C
ATOM   3849  C   ARG B 268      36.434  20.675  26.377  1.00 23.37           C
ATOM   3850  O   ARG B 268      35.277  20.652  25.955  1.00 23.33           O
ATOM   3851  CB  ARG B 268      37.712  18.516  26.629  1.00 23.25           C
ATOM   3852  N   GLU B 269      36.837  21.479  27.362  1.00 23.40           N
ATOM   3853  CA  GLU B 269      35.951  22.461  27.993  1.00 23.39           C
ATOM   3854  C   GLU B 269      35.597  23.593  27.031  1.00 23.21           C
ATOM   3855  O   GLU B 269      34.508  24.163  27.107  1.00 23.24           O
ATOM   3856  CB  GLU B 269      36.597  23.045  29.251  1.00 23.52           C
ATOM   3857  CG  GLU B 269      36.686  22.083  30.427  1.00 23.83           C
ATOM   3858  CD  GLU B 269      37.748  22.483  31.438  1.00 24.73           C
ATOM   3859  OE1 GLU B 269      38.548  23.402  31.149  1.00 25.10           O
ATOM   3860  OE2 GLU B 269      37.783  21.878  32.531  1.00 25.14           O
ATOM   3861  N   LEU B 270      36.527  23.908  26.133  1.00 23.07           N
ATOM   3862  CA  LEU B 270      36.321  24.933  25.114  1.00 22.76           C
ATOM   3863  C   LEU B 270      35.275  24.523  24.075  1.00 22.71           C
ATOM   3864  O   LEU B 270      34.531  25.369  23.577  1.00 22.69           O
ATOM   3865  CB  LEU B 270      37.649  25.288  24.433  1.00 22.70           C
ATOM   3866  CG  LEU B 270      38.618  26.170  25.229  1.00 22.46           C
ATOM   3867  CD1 LEU B 270      40.030  26.069  24.672  1.00 22.28           C
ATOM   3868  CD2 LEU B 270      38.159  27.615  25.245  1.00 22.09           C
ATOM   3869  N   ILE B 271      35.225  23.230  23.750  1.00 22.59           N
ATOM   3870  CA  ILE B 271      34.211  22.702  22.835  1.00 22.57           C
ATOM   3871  C   ILE B 271      32.812  22.885  23.422  1.00 22.61           C
ATOM   3872  O   ILE B 271      31.893  23.305  22.720  1.00 22.45           O
ATOM   3873  CB  ILE B 271      34.462  21.202  22.514  1.00 22.54           C
ATOM   3874  CG1 ILE B 271      35.747  21.021  21.706  1.00 22.32           C
ATOM   3875  CD1 ILE B 271      36.329  19.621  21.789  1.00 21.94           C
ATOM   3876  CG2 ILE B 271      33.276  20.592  21.757  1.00 22.48           C
ATOM   3877  N   ILE B 272      32.669  22.575  24.710  1.00 22.76           N
ATOM   3878  CA  ILE B 272      31.377  22.631  25.396  1.00 22.92           C
ATOM   3879  C   ILE B 272      30.822  24.053  25.461  1.00 23.12           C
ATOM   3880  O   ILE B 272      29.682  24.295  25.055  1.00 23.21           O
ATOM   3881  CB  ILE B 272      31.468  22.006  26.819  1.00 22.82           C
ATOM   3882  CG1 ILE B 272      31.923  20.543  26.743  1.00 22.59           C
ATOM   3883  CD1 ILE B 272      32.685  20.065  27.961  1.00 21.74           C
ATOM   3884  CG2 ILE B 272      30.129  22.098  27.538  1.00 22.80           C
ATOM   3885  N   GLU B 273      31.633  24.986  25.956  1.00 23.34           N
ATOM   3886  CA  GLU B 273      31.180  26.355  26.192  1.00 23.79           C
ATOM   3887  C   GLU B 273      30.864  27.118  24.906  1.00 23.85           C
ATOM   3888  O   GLU B 273      29.939  27.931  24.877  1.00 23.84           O
ATOM   3889  CB  GLU B 273      32.190  27.123  27.049  1.00 24.01           C
ATOM   3890  CG  GLU B 273      31.702  27.421  28.464  1.00 24.72           C
ATOM   3891  CD  GLU B 273      31.395  26.165  29.265  1.00 25.33           C
ATOM   3892  OE1 GLU B 273      32.345  25.518  29.760  1.00 25.88           O
ATOM   3893  OE2 GLU B 273      30.202  25.819  29.397  1.00 25.43           O
ATOM   3894  N   PHE B 274      31.624  26.848  23.849  1.00 23.85           N
ATOM   3895  CA  PHE B 274      31.379  27.482  22.559  1.00 23.81           C
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FIG. 4MMM

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ATOM   3896  C   PHE B 274      30.189  26.858  21.835  1.00 24.11           C
ATOM   3897  O   PHE B 274      29.513  27.531  21.056  1.00 24.18           O
ATOM   3898  CB  PHE B 274      32.634  27.463  21.685  1.00 23.47           C
ATOM   3899  CG  PHE B 274      33.524  28.661  21.880  1.00 22.83           C
ATOM   3900  CD1 PHE B 274      33.143  29.915  21.407  1.00 22.33           C
ATOM   3901  CE1 PHE B 274      33.962  31.027  21.586  1.00 21.86           C
ATOM   3902  CZ  PHE B 274      35.178  30.891  22.247  1.00 21.83           C
ATOM   3903  CE2 PHE B 274      35.567  29.643  22.726  1.00 22.15           C
ATOM   3904  CD2 PHE B 274      34.740  28.537  22.541  1.00 22.25           C
ATOM   3905  N   SER B 275      29.937  25.576  22.100  1.00 24.38           N
ATOM   3906  CA  SER B 275      28.752  24.892  21.589  1.00 24.77           C
ATOM   3907  C   SER B 275      27.493  25.446  22.243  1.00 25.16           C
ATOM   3908  O   SER B 275      26.458  25.592  21.589  1.00 25.23           O
ATOM   3909  CB  SER B 275      28.841  23.386  21.840  1.00 24.72           C
ATOM   3910  OG  SER B 275      29.854  22.793  21.046  1.00 25.10           O
ATOM   3911  N   LYS B 276      27.595  25.742  23.538  1.00 25.66           N
ATOM   3912  CA  LYS B 276      26.512  26.348  24.304  1.00 26.04           C
ATOM   3913  C   LYS B 276      26.185  27.730  23.745  1.00 26.35           C
ATOM   3914  O   LYS B 276      25.018  28.110  23.652  1.00 26.43           O
ATOM   3915  CB  LYS B 276      26.901  26.446  25.782  1.00 26.03           C
ATOM   3916  CG  LYS B 276      25.763  26.832  26.715  1.00 25.87           C
ATOM   3917  N   MET B 277      27.228  28.465  23.368  1.00 26.84           N
ATOM   3918  CA  MET B 277      27.082  29.782  22.756  1.00 27.25           C
ATOM   3919  C   MET B 277      26.618  29.679  21.302  1.00 27.53           C
ATOM   3920  O   MET B 277      25.908  30.553  20.814  1.00 27.62           O
ATOM   3921  CB  MET B 277      28.391  30.570  22.855  1.00 27.16           C
ATOM   3922  CG  MET B 277      28.783  30.929  24.282  1.00 27.12           C
ATOM   3923  SD  MET B 277      30.441  31.625  24.421  1.00 27.75           S
ATOM   3924  CE  MET B 277      30.391  32.243  26.081  1.00 27.55           C
ATOM   3925  N   ALA B 278      27.011  28.601  20.626  1.00 28.12           N
ATOM   3926  CA  ALA B 278      26.583  28.336  19.250  1.00 28.73           C
ATOM   3927  C   ALA B 278      25.097  27.981  19.163  1.00 29.23           C
ATOM   3928  O   ALA B 278      24.518  27.967  18.073  1.00 29.49           O
ATOM   3929  CB  ALA B 278      27.428  27.230  18.634  1.00 28.63           C
ATOM   3930  N   ARG B 279      24.493  27.695  20.314  1.00 29.77           N
ATOM   3931  CA  ARG B 279      23.075  27.360  20.398  1.00 30.15           C
ATOM   3932  C   ARG B 279      22.201  28.612  20.394  1.00 30.30           C
ATOM   3933  O   ARG B 279      21.026  28.556  20.029  1.00 30.44           O
ATOM   3934  CB  ARG B 279      22.806  26.539  21.659  1.00 30.29           C
ATOM   3935  CG  ARG B 279      22.364  25.110  21.394  1.00 30.93           C
ATOM   3936  CD  ARG B 279      23.462  24.072  21.569  1.00 31.45           C
ATOM   3937  NE  ARG B 279      23.708  23.750  22.975  1.00 31.80           N
ATOM   3938  CZ  ARG B 279      24.647  22.910  23.403  1.00 32.04           C
ATOM   3939  NH1 ARG B 279      24.792  22.686  24.703  1.00 32.21           N
ATOM   3940  NH2 ARG B 279      25.444  22.290  22.539  1.00 31.88           N
ATOM   3941  N   ASP B 280      22.785  29.734  20.805  1.00 30.56           N
ATOM   3942  CA  ASP B 280      22.081  31.010  20.904  1.00 30.76           C
ATOM   3943  C   ASP B 280      23.089  32.142  20.663  1.00 30.85           C
ATOM   3944  O   ASP B 280      23.477  32.846  21.600  1.00 30.94           O
ATOM   3945  CB  ASP B 280      21.418  31.130  22.284  1.00 30.99           C
ATOM   3946  CG  ASP B 280      20.542  32.370  22.426  1.00 31.58           C
ATOM   3947  OD1 ASP B 280      20.137  32.963  21.401  1.00 32.09           O
ATOM   3948  OD2 ASP B 280      20.204  32.819  23.542  1.00 31.92           O
ATOM   3949  N   PRO B 281      23.509  32.313  19.406  1.00 30.83           N
ATOM   3950  CA  PRO B 281      24.641  33.191  19.071  1.00 30.79           C
ATOM   3951  C   PRO B 281      24.399  34.683  19.311  1.00 30.73           C
ATOM   3952  O   PRO B 281      25.361  35.416  19.558  1.00 30.61           O
ATOM   3953  CB  PRO B 281      24.864  32.919  17.580  1.00 30.83           C
ATOM   3954  CG  PRO B 281      23.553  32.440  17.078  1.00 30.89           C
ATOM   3955  CD  PRO B 281      22.931  31.681  18.205  1.00 30.85           C
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FIG. 4NNN

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ATOM   3956  N   GLN B 282      23.143  35.115  19.244  1.00 30.74           N
ATOM   3957  CA  GLN B 282      22.789  36.524  19.422  1.00 30.84           C
ATOM   3958  C   GLN B 282      23.001  36.998  20.861  1.00 30.75           C
ATOM   3959  O   GLN B 282      23.153  38.194  21.114  1.00 30.84           O
ATOM   3960  CB  GLN B 282      21.340  36.774  18.992  1.00 30.99           C
ATOM   3961  CG  GLN B 282      20.970  36.173  17.635  1.00 31.18           C
ATOM   3962  CD  GLN B 282      20.824  37.215  16.543  1.00 31.13           C
ATOM   3963  OE1 GLN B 282      20.420  38.347  16.805  1.00 31.87           O
ATOM   3964  NE2 GLN B 282      21.143  36.832  15.314  1.00 31.11           N
ATOM   3965  N   ARG B 283      23.015  36.047  21.791  1.00 30.72           N
ATOM   3966  CA  ARG B 283      23.224  36.327  23.206  1.00 30.66           C
ATOM   3967  C   ARG B 283      24.686  36.632  23.523  1.00 30.48           C
ATOM   3968  O   ARG B 283      24.986  37.264  24.538  1.00 30.68           O
ATOM   3969  CB  ARG B 283      22.751  35.137  24.049  1.00 30.76           C
ATOM   3970  CG  ARG B 283      22.352  35.492  25.476  1.00 31.39           C
ATOM   3971  CD  ARG B 283      21.641  34.373  26.224  1.00 32.24           C
ATOM   3972  NE  ARG B 283      22.182  34.181  27.570  1.00 32.93           N
ATOM   3973  CZ  ARG B 283      21.462  33.846  28.638  1.00 33.23           C
ATOM   3974  NH1 ARG B 283      22.059  33.695  29.814  1.00 33.09           N
ATOM   3975  NH2 ARG B 283      20.149  33.658  28.541  1.00 33.41           N
ATOM   3976  N   TYR B 284      25.591  36.190  22.654  1.00 30.20           N
ATOM   3977  CA  TYR B 284      27.020  36.234  22.957  1.00 29.92           C
ATOM   3978  C   TYR B 284      27.840  37.084  21.988  1.00 29.85           C
ATOM   3979  O   TYR B 284      28.956  37.494  22.313  1.00 29.72           O
ATOM   3980  CB  TYR B 284      27.583  34.812  23.069  1.00 29.87           C
ATOM   3981  CG  TYR B 284      26.868  33.973  24.108  1.00 29.73           C
ATOM   3982  CD1 TYR B 284      25.850  33.094  23.742  1.00 29.75           C
ATOM   3983  CE1 TYR B 284      25.184  32.327  24.695  1.00 29.98           C
ATOM   3984  CZ  TYR B 284      25.535  32.443  26.032  1.00 29.92           C
ATOM   3985  OH  TYR B 284      24.883  31.690  26.983  1.00 29.95           O
ATOM   3986  CE2 TYR B 284      26.541  33.311  26.418  1.00 29.77           C
ATOM   3987  CD2 TYR B 284      27.199  34.071  25.458  1.00 29.72           C
ATOM   3988  N   LEU B 285      27.285  37.352  20.807  1.00 29.69           N
ATOM   3989  CA  LEU B 285      27.907  38.272  19.856  1.00 29.64           C
ATOM   3990  C   LEU B 285      26.898  39.279  19.302  1.00 29.82           C
ATOM   3991  O   LEU B 285      25.762  38.920  18.971  1.00 29.58           O
ATOM   3992  CB  LEU B 285      28.593  37.513  18.714  1.00 29.47           C
ATOM   3993  CG  LEU B 285      29.794  36.606  19.007  1.00 28.85           C
ATOM   3994  CD1 LEU B 285      30.244  35.920  17.730  1.00 28.51           C
ATOM   3995  CD2 LEU B 285      30.950  37.368  19.639  1.00 28.37           C
ATOM   3996  N   VAL B 286      27.323  40.539  19.209  1.00 29.96           N
ATOM   3997  CA  VAL B 286      26.472  41.622  18.716  1.00 30.20           C
ATOM   3998  C   VAL B 286      27.058  42.233  17.440  1.00 30.44           C
ATOM   3999  O   VAL B 286      28.050  42.968  17.485  1.00 30.62           O
ATOM   4000  CB  VAL B 286      26.249  42.726  19.793  1.00 30.23           C
ATOM   4001  CG1 VAL B 286      25.298  43.807  19.284  1.00 30.11           C
ATOM   4002  CG2 VAL B 286      25.725  42.125  21.095  1.00 30.10           C
ATOM   4003  N   ILE B 287      26.442  41.912  16.306  1.00 30.62           N
ATOM   4004  CA  ILE B 287      26.855  42.455  15.013  1.00 30.93           C
ATOM   4005  C   ILE B 287      25.692  43.218  14.381  1.00 31.07           C
ATOM   4006  O   ILE B 287      24.540  42.781  14.454  1.00 31.00           O
ATOM   4007  CB  ILE B 287      27.372  41.330  14.065  1.00 31.02           C
ATOM   4008  CG1 ILE B 287      28.484  40.514  14.734  1.00 30.90           C
ATOM   4009  CD1 ILE B 287      28.421  39.033  14.443  1.00 31.01           C
ATOM   4010  CG2 ILE B 287      27.888  41.917  12.749  1.00 31.03           C
ATOM   4011  N   GLN B 288      26.004  44.363  13.775  1.00 31.11           N
ATOM   4012  CA  GLN B 288      25.006  45.206  13.117  1.00 30.91           C
ATOM   4013  C   GLN B 288      24.328  44.472  11.961  1.00 30.82           C
ATOM   4014  O   GLN B 288      23.103  44.524  11.817  1.00 30.96           O
ATOM   4015  CB  GLN B 288      25.647  46.504  12.620  1.00 31.04           C
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FIG. 4OOO

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ATOM   4016  N   GLY B 289      25.130  43.781  11.151  1.00 30.32           N
ATOM   4017  CA  GLY B 289      24.620  42.982  10.050  1.00 29.97           C
ATOM   4018  C   GLY B 289      24.025  41.663  10.514  1.00 29.71           C
ATOM   4019  O   GLY B 289      24.322  40.603   9.951  1.00 29.80           O
ATOM   4020  N   GLU B 290      23.179  41.739  11.540  1.00 29.17           N
ATOM   4021  CA  GLU B 290      22.544  40.570  12.140  1.00 28.68           C
ATOM   4022  C   GLU B 290      21.102  40.887  12.531  1.00 28.79           C
ATOM   4023  O   GLU B 290      20.511  41.853  12.040  1.00 28.90           O
ATOM   4024  CB  GLU B 290      23.334  40.116  13.372  1.00 28.31           C
ATOM   4025  CG  GLU B 290      23.386  38.610  13.587  1.00 27.52           C
ATOM   4026  CD  GLU B 290      24.270  37.885  12.588  1.00 27.08           C
ATOM   4027  OE1 GLU B 290      25.146  38.521  11.963  1.00 27.14           O
ATOM   4028  OE2 GLU B 290      24.084  36.665  12.425  1.00 27.57           O
TER    4029      GLU B 290
HETATM 4030  O1A ANP W   1      54.152  28.767   4.525  1.00 14.19           O
HETATM 4031  PA  ANP W   1      52.665  29.162   4.909  1.00 14.23           P
HETATM 4032  O2A ANP W   1      52.045  28.041   5.844  1.00 14.69           O
HETATM 4033  O3A ANP W   1      52.635  30.626   5.591  1.00 14.46           O
HETATM 4034  PB  ANP W   1      51.592  31.138   6.713  1.00 14.01           P
HETATM 4035  O1B ANP W   1      50.427  30.096   6.982  1.00 14.07           O
HETATM 4036  O2B ANP W   1      50.966  32.525   6.257  1.00 14.38           O
HETATM 4037  N3B ANP W   1      52.464  31.438   8.189  1.00 13.82           N
HETATM 4038  PG  ANP W   1      53.106  30.114   9.118  1.00 12.66           P
HETATM 4039  O3G ANP W   1      52.248  28.804   8.839  1.00 13.65           O
HETATM 4040  O2G ANP W   1      53.031  30.526  10.647  1.00 13.04           O
HETATM 4041  O1G ANP W   1      54.615  29.839   8.717  1.00 12.98           O
HETATM 4042  O5* ANP W   1      51.775  29.328   3.577  1.00 15.00           O
HETATM 4043  C5* ANP W   1      51.932  30.426   2.677  1.00 15.96           C
HETATM 4044  C4* ANP W   1      50.621  30.671   1.929  1.00 16.58           C
HETATM 4045  O4* ANP W   1      50.160  29.456   1.323  1.00 16.78           O
HETATM 4046  C1* ANP W   1      48.800  29.196   1.685  1.00 17.15           C
HETATM 4047  C2* ANP W   1      48.549  29.985   2.965  1.00 17.11           C
HETATM 4048  O2* ANP W   1      47.198  30.414   3.085  1.00 16.97           O
HETATM 4049  C3* ANP W   1      49.514  31.155   2.857  1.00 16.74           C
HETATM 4050  O3* ANP W   1      48.868  32.271   2.273  1.00 16.57           O
HETATM 4051  N9  ANP W   1      48.587  27.743   1.894  1.00 17.64           N
HETATM 4052  C8  ANP W   1      49.262  26.916   2.735  1.00 17.81           C
HETATM 4053  N7  ANP W   1      48.810  25.620   2.687  1.00 18.02           N
HETATM 4054  C5  ANP W   1      47.812  25.599   1.786  1.00 18.38           C
HETATM 4055  C6  ANP W   1      46.850  24.636   1.180  1.00 18.92           C
HETATM 4056  N6  ANP W   1      46.865  23.332   1.554  1.00 19.07           N
HETATM 4057  C4  ANP W   1      47.693  26.965   1.301  1.00 17.99           C
HETATM 4058  N3  ANP W   1      46.710  27.322   0.309  1.00 18.03           N
HETATM 4059  C2  ANP W   1      45.899  26.361  -0.165  1.00 18.44           C
HETATM 4060  N1  ANP W   1      45.961  25.077   0.249  1.00 18.87           N
HETATM 4061  O1A ANP W   2      19.403   6.203  15.674  1.00 15.26           O
HETATM 4062  PA  ANP W   2      18.049   5.565  16.209  1.00 15.32           P
HETATM 4063  O2A ANP W   2      18.326   4.676  17.493  1.00 15.23           O
HETATM 4064  O3A ANP W   2      16.971   6.730  16.499  1.00 15.88           O
HETATM 4065  PB  ANP W   2      15.646   6.537  17.396  1.00 16.01           P
HETATM 4066  O1B ANP W   2      15.547   5.062  17.973  1.00 16.94           O
HETATM 4067  O2B ANP W   2      14.364   6.863  16.519  1.00 16.42           O
HETATM 4068  N3B ANP W   2      15.695   7.656  18.730  1.00 16.44           N
HETATM 4069  PG  ANP W   2      16.958   7.503  19.920  1.00 16.23           P
HETATM 4070  O3G ANP W   2      17.525   6.020  19.897  1.00 16.82           O
HETATM 4071  O2G ANP W   2      16.321   7.826  21.340  1.00 16.56           O
HETATM 4072  O1G ANP W   2      18.143   8.515  19.599  1.00 16.37           O
HETATM 4073  O5* ANP W   2      17.363   4.666  15.069  1.00 15.30           O
HETATM 4074  C5* ANP W   2      16.957   5.226  13.824  1.00 15.80           C
HETATM 4075  C4* ANP W   2      16.040   4.244  13.108  1.00 16.07           C
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FIG. 4PPP

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HETATM 4076  O4* ANP W   2      16.717   2.997  12.922  1.00 16.33           O
HETATM 4077  C1* ANP W   2      15.922   1.921  13.431  1.00 16.41           C
HETATM 4078  C2* ANP W   2      14.972   2.540  14.445  1.00 16.48           C
HETATM 4079  O2* ANP W   2      13.732   1.854  14.511  1.00 16.84           O
HETATM 4080  C3* ANP W   2      14.786   3.951  13.916  1.00 16.27           C
HETATM 4081  O3* ANP W   2      13.667   4.004  13.048  1.00 16.31           O
HETATM 4082  N9   ANP W   2      16.810   0.874  13.995  1.00 16.25           N
HETATM 4083  C8   ANP W   2      17.822   1.016  14.888  1.00 16.35           C
HETATM 4084  N7   ANP W   2      18.453  -0.174  15.174  1.00 16.50           N
HETATM 4085  C5   ANP W   2      17.839  -1.115  14.436  1.00 16.63           C
HETATM 4086  C6   ANP W   2      17.907  -2.578  14.172  1.00 16.77           C
HETATM 4087  N6   ANP W   2      18.829  -3.340  14.806  1.00 17.13           N
HETATM 4088  C4   ANP W   2      16.800  -0.416  13.694  1.00 16.65           C
HETATM 4089  N3   ANP W   2      15.924  -1.117  12.781  1.00 16.77           N
HETATM 4090  C2   ANP W   2      16.087  -2.445  12.630  1.00 16.80           C
HETATM 4091  N1   ANP W   2      17.035  -3.143  13.293  1.00 16.71           N
HETATM 4092 MG    MG W   3      50.504  28.210   7.268  1.00 25.98          MG
HETATM 4093 MG    MG W   4      16.970   3.922  18.643  1.00  7.82          MG
HETATM 4094  O    HOH W   5       4.290  11.548  33.626  1.00  6.42           O
HETATM 4095  O    HOH W   6      18.999  -0.021  34.227  1.00 16.10           O
HETATM 4096  O    HOH W   7      50.184  27.299  18.765  1.00  3.07           O
HETATM 4097  O    HOH W   8      16.094   5.310  30.267  1.00  2.00           O
HETATM 4098  O    HOH W   9      21.140  -9.281  11.284  1.00 13.72           O
HETATM 4099  O    HOH W  10      12.663 -11.281  13.567  1.00 30.98           O
HETATM 4100  O    HOH W  11      42.871  16.268   5.531  1.00  3.37           O
HETATM 4101  O    HOH W  12       5.321   8.123  21.448  1.00 13.81           O
HETATM 4102  O    HOH W  13      12.492  -7.983  13.744  1.00 17.68           O
HETATM 4103  O    HOH W  14     -10.354  -6.119  27.605  1.00 32.05           O
HETATM 4104  O    HOH W  15      44.859  36.969  30.762  1.00  6.38           O
HETATM 4105  O    HOH W  16     -10.333   1.111  37.170  1.00 40.24           O
HETATM 4106  O    HOH W  17      15.243  -4.807  39.557  1.00  5.14           O
HETATM 4107  O    HOH W  18      28.726  -6.171  34.736  1.00 11.86           O
HETATM 4108  O    HOH W  19      30.980  44.276  27.536  1.00  5.15           O
HETATM 4109  O    HOH W  20      44.582  32.439   1.893  1.00 13.93           O
HETATM 4110  O    HOH W  21      40.070  32.836   2.334  1.00  2.00           O
HETATM 4111  O    HOH W  22      41.231  18.825  25.667  1.00 10.34           O
HETATM 4112  O    HOH W  23      52.638  29.706  18.724  1.00 44.04           O
HETATM 4113  O    HOH W  24      34.149  -9.405  10.655  1.00 28.63           O
HETATM 4114  O    HOH W  25      -5.908  11.084  33.794  1.00 20.58           O
HETATM 4115  O    HOH W  26      21.006  20.012  31.996  1.00 24.85           O
HETATM 4116  O    HOH W  27      52.463  34.089   4.899  1.00 20.21           O
HETATM 4117  O    HOH W  28      11.154 -10.162  43.370  1.00 21.83           O
HETATM 4118  O    HOH W  29      14.409   8.134  26.716  1.00 26.10           O
HETATM 4119  O    HOH W  30      48.209   9.659   1.939  1.00 33.23           O
HETATM 4120  O    HOH W  31       6.904  -1.951  13.417  1.00 25.25           O
HETATM 4121  O    HOH W  32      15.899 -10.068  34.616  1.00  4.64           O
HETATM 4122  O    HOH W  33      47.779  20.359  21.519  1.00  5.98           O
HETATM 4123  O    HOH W  34       3.700  10.587  40.253  1.00  7.89           O
HETATM 4124  O    HOH W  35     -11.781  -7.560  24.631  1.00 26.81           O
HETATM 4125  O    HOH W  36      37.071  47.600  22.181  1.00 31.63           O
HETATM 4126  O    HOH W  37      53.336  25.403  28.783  1.00 15.60           O
HETATM 4127  O    HOH W  38      34.560  -9.596  23.541  1.00 32.06           O
HETATM 4128  O    HOH W  39      44.712  45.040  28.718  1.00 29.39           O
HETATM 4129  O    HOH W  40      32.687   0.085   5.244  1.00 34.81           O
HETATM 4130  O    HOH W  41      29.485 -10.969  17.606  1.00 24.11           O
HETATM 4131  O    HOH W  42      55.740  27.886   6.683  1.00 14.12           O
HETATM 4132  O    HOH W  43      -8.611  -7.982  24.987  1.00 15.68           O
HETATM 4133  O    HOH W  44      32.322  -9.118  24.990  1.00 18.15           O
HETATM 4134  O    HOH W  45       0.125  16.011  31.233  1.00 17.73           O
HETATM 4135  O    HOH W  46      20.590   7.834  17.742  1.00 25.02           O
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FIG. 4QQQ

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HETATM 4136  O   HOH W  47      49.359  25.038   5.554  1.00 13.72           O
HETATM 4137  O   HOH W  48      34.347   3.367  11.863  1.00 13.64           O
HETATM 4138  O   HOH W  49      -1.101  23.372  37.260  1.00 25.81           O
HETATM 4139  O   HOH W  50      45.799  45.166  19.287  1.00 25.43           O
HETATM 4140  O   HOH W  51      25.282 -14.857  30.672  1.00 22.55           O
HETATM 4141  O   HOH W  52      52.355  26.732  21.087  1.00 23.92           O
HETATM 4142  O   HOH W  53      43.158  15.435  26.674  1.00 32.37           O
HETATM 4143  O   HOH W  54      34.583  43.175  16.714  1.00 25.93           O
HETATM 4144  O   HOH W  55      38.962  24.995   0.100  1.00 25.43           O
HETATM 4145  O   HOH W  56      42.851  14.558   9.528  1.00 24.68           O
HETATM 4146  O   HOH W  57       3.405  21.917  22.000  1.00 20.97           O
HETATM 4147  O   HOH W  58      23.078  -0.069  19.421  1.00 19.58           O
HETATM 4148  O   HOH W  59      14.326  -4.757   6.647  1.00 19.83           O
HETATM 4149  O   HOH W  60      28.614  27.321   1.239  1.00 27.54           O
HETATM 4150  O   HOH W  61      48.149  31.411   5.943  1.00 14.29           O
HETATM 4151  O   HOH W  62      -0.670  21.642  39.051  1.00 22.00           O
HETATM 4152  O   HOH W  63      24.223 -17.815  26.796  1.00 23.19           O
HETATM 4153  O   HOH W  64      43.922  21.892  26.412  1.00 27.31           O
HETATM 4154  O   HOH W  65      15.076  10.275  18.291  1.00 26.76           O
END
```

FIG. 4RRR

CRYST1 34.686 85.703 180.248 90.00 90.00 90.00 P 21 21 21 4

	Atom Type		Residue	#	X	Y	Z	OCC	B	Atom
ATOM	1	N	LEU A	9	8.096	0.008	38.058	1.00	35.38	N
ATOM	2	CA	LEU A	9	8.705	-0.126	36.704	1.00	35.26	C
ATOM	3	C	LEU A	9	10.203	0.196	36.697	1.00	34.71	C
ATOM	4	O	LEU A	9	10.937	-0.304	35.847	1.00	35.05	O
ATOM	5	CB	LEU A	9	7.966	0.768	35.699	1.00	35.55	C
ATOM	6	CG	LEU A	9	6.983	0.120	34.717	1.00	36.39	C
ATOM	7	CD1	LEU A	9	7.718	-0.584	33.591	1.00	37.01	C
ATOM	8	CD2	LEU A	9	6.029	-0.855	35.420	1.00	37.57	C
ATOM	9	N	LEU A	10	10.642	1.023	37.646	1.00	33.74	N
ATOM	10	CA	LEU A	10	12.030	1.475	37.720	1.00	32.92	C
ATOM	11	C	LEU A	10	12.862	0.611	38.659	1.00	33.05	C
ATOM	12	O	LEU A	10	12.483	0.374	39.808	1.00	32.92	O
ATOM	13	CB	LEU A	10	12.091	2.947	38.156	1.00	32.54	C
ATOM	14	CG	LEU A	10	13.449	3.607	38.424	1.00	32.04	C
ATOM	15	CD1	LEU A	10	14.153	3.989	37.139	1.00	31.90	C
ATOM	16	CD2	LEU A	10	13.304	4.825	39.331	1.00	31.86	C
ATOM	17	N	ARG A	11	14.000	0.143	38.166	1.00	32.98	N
ATOM	18	CA	ARG A	11	14.927	-0.595	39.007	1.00	33.21	C
ATOM	19	C	ARG A	11	16.034	0.323	39.486	1.00	32.79	C
ATOM	20	O	ARG A	11	16.718	0.962	38.687	1.00	32.84	O
ATOM	21	CB	ARG A	11	15.513	-1.791	38.259	1.00	33.61	C
ATOM	22	CG	ARG A	11	14.878	-3.099	38.639	1.00	35.02	C
ATOM	23	CD	ARG A	11	14.193	-3.810	37.493	1.00	37.55	C
ATOM	24	NE	ARG A	11	15.005	-4.896	36.942	1.00	39.91	N
ATOM	25	CZ	ARG A	11	15.247	-6.054	37.559	1.00	41.36	C
ATOM	26	NH1	ARG A	11	15.994	-6.977	36.964	1.00	42.17	N
ATOM	27	NH2	ARG A	11	14.756	-6.296	38.769	1.00	41.80	N
ATOM	28	N	ILE A	12	16.199	0.396	40.798	1.00	32.17	N
ATOM	29	CA	ILE A	12	17.286	1.170	41.367	1.00	31.92	C
ATOM	30	C	ILE A	12	18.427	0.204	41.656	1.00	31.86	C
ATOM	31	O	ILE A	12	18.321	-0.656	42.531	1.00	31.99	O
ATOM	32	CB	ILE A	12	16.823	1.936	42.625	1.00	32.09	C
ATOM	33	CG1	ILE A	12	15.554	2.741	42.311	1.00	30.95	C
ATOM	34	CD1	ILE A	12	14.744	3.138	43.528	1.00	32.11	C
ATOM	35	CG2	ILE A	12	17.961	2.838	43.161	1.00	31.67	C
ATOM	36	N	LEU A	13	19.508	0.345	40.894	1.00	31.41	N
ATOM	37	CA	LEU A	13	20.584	-0.633	40.905	1.00	31.04	C
ATOM	38	C	LEU A	13	21.776	-0.217	41.742	1.00	31.06	C
ATOM	39	O	LEU A	13	22.015	0.969	41.965	1.00	30.83	O
ATOM	40	CB	LEU A	13	21.037	-0.968	39.476	1.00	31.01	C
ATOM	41	CG	LEU A	13	19.977	-1.377	38.448	1.00	30.07	C
ATOM	42	CD1	LEU A	13	20.614	-1.480	37.085	1.00	29.65	C
ATOM	43	CD2	LEU A	13	19.312	-2.689	38.828	1.00	30.21	C
ATOM	44	N	LYS A	14	22.504	-1.231	42.204	1.00	31.15	N
ATOM	45	CA	LYS A	14	23.772	-1.084	42.906	1.00	31.49	C
ATOM	46	C	LYS A	14	24.890	-1.119	41.873	1.00	31.65	C
ATOM	47	O	LYS A	14	24.764	-1.801	40.849	1.00	31.42	O
ATOM	48	CB	LYS A	14	23.935	-2.272	43.852	1.00	31.82	C
ATOM	49	CG	LYS A	14	24.780	-2.033	45.069	1.00	32.02	C
ATOM	50	CD	LYS A	14	24.326	-2.941	46.205	1.00	33.01	C
ATOM	51	CE	LYS A	14	24.637	-4.406	45.932	1.00	32.29	C
ATOM	52	NZ	LYS A	14	24.743	-5.168	47.198	1.00	33.27	N
ATOM	53	N	GLU A	15	25.989	-0.418	42.146	1.00	31.81	N
ATOM	54	CA	GLU A	15	27.120	-0.359	41.210	1.00	32.48	C

FIG. 5A

```
ATOM     55  C   GLU A  15      27.806  -1.708  40.932  1.00 32.41           C
ATOM     56  O   GLU A  15      28.520  -1.843  39.930  1.00 32.25           O
ATOM     57  CB  GLU A  15      28.146   0.697  41.647  1.00 32.94           C
ATOM     58  CG  GLU A  15      29.148   0.224  42.692  1.00 34.55           C
ATOM     59  CD  GLU A  15      29.762   1.362  43.481  1.00 36.00           C
ATOM     60  OE1 GLU A  15      29.775   2.496  42.967  1.00 37.36           O
ATOM     61  OE2 GLU A  15      30.241   1.124  44.616  1.00 36.70           O
ATOM     62  N   THR A  16      27.579  -2.695  41.803  1.00 32.34           N
ATOM     63  CA  THR A  16      28.221  -4.011  41.675  1.00 32.01           C
ATOM     64  C   THR A  16      27.426  -4.969  40.801  1.00 32.45           C
ATOM     65  O   THR A  16      27.900  -6.066  40.481  1.00 32.83           O
ATOM     66  CB  THR A  16      28.429  -4.668  43.052  1.00 32.11           C
ATOM     67  OG1 THR A  16      27.210  -4.601  43.808  1.00 30.97           O
ATOM     68  CG2 THR A  16      29.442  -3.896  43.879  1.00 31.66           C
ATOM     69  N   GLU A  17      26.213  -4.562  40.434  1.00 32.29           N
ATOM     70  CA  GLU A  17      25.342  -5.371  39.585  1.00 32.18           C
ATOM     71  C   GLU A  17      25.581  -5.121  38.091  1.00 31.51           C
ATOM     72  O   GLU A  17      25.015  -5.815  37.242  1.00 30.95           O
ATOM     73  CB  GLU A  17      23.875  -5.100  39.915  1.00 32.72           C
ATOM     74  CG  GLU A  17      23.516  -5.222  41.384  1.00 34.07           C
ATOM     75  CD  GLU A  17      22.019  -5.154  41.605  1.00 36.41           C
ATOM     76  OE1 GLU A  17      21.487  -4.029  41.762  1.00 37.08           O
ATOM     77  OE2 GLU A  17      21.374  -6.226  41.610  1.00 36.87           O
ATOM     78  N   PHE A  18      26.402  -4.121  37.774  1.00 30.88           N
ATOM     79  CA  PHE A  18      26.700  -3.792  36.382  1.00 30.61           C
ATOM     80  C   PHE A  18      28.151  -3.385  36.194  1.00 30.75           C
ATOM     81  O   PHE A  18      28.791  -2.904  37.121  1.00 31.58           O
ATOM     82  CB  PHE A  18      25.725  -2.733  35.816  1.00 29.96           C
ATOM     83  CG  PHE A  18      25.812  -1.390  36.493  1.00 28.54           C
ATOM     84  CD1 PHE A  18      26.686  -0.412  36.022  1.00 27.16           C
ATOM     85  CE1 PHE A  18      26.775   0.832  36.646  1.00 27.02           C
ATOM     86  CZ  PHE A  18      25.975   1.113  37.750  1.00 27.13           C
ATOM     87  CE2 PHE A  18      25.090   0.140  38.228  1.00 27.91           C
ATOM     88  CD2 PHE A  18      25.010  -1.102  37.597  1.00 27.48           C
ATOM     89  N   LYS A  19      28.665  -3.584  34.988  1.00 31.19           N
ATOM     90  CA  LYS A  19      30.030  -3.194  34.661  1.00 31.21           C
ATOM     91  C   LYS A  19      30.057  -2.449  33.335  1.00 31.16           C
ATOM     92  O   LYS A  19      29.541  -2.943  32.330  1.00 30.67           O
ATOM     93  CB  LYS A  19      30.930  -4.430  34.576  1.00 31.45           C
ATOM     94  CG  LYS A  19      31.761  -4.681  35.822  1.00 32.26           C
ATOM     95  N   LYS A  20      30.654  -1.260  33.341  1.00 31.15           N
ATOM     96  CA  LYS A  20      30.934  -0.546  32.105  1.00 31.40           C
ATOM     97  C   LYS A  20      32.021  -1.321  31.374  1.00 31.40           C
ATOM     98  O   LYS A  20      33.053  -1.639  31.956  1.00 31.52           O
ATOM     99  CB  LYS A  20      31.399   0.889  32.376  1.00 31.51           C
ATOM    100  CG  LYS A  20      30.380   1.782  33.069  1.00 31.94           C
ATOM    101  CD  LYS A  20      30.794   3.245  33.003  1.00 33.29           C
ATOM    102  CE  LYS A  20      31.526   3.728  34.258  1.00 33.37           C
ATOM    103  NZ  LYS A  20      30.997   3.136  35.524  1.00 34.90           N
ATOM    104  N   ILE A  21      31.783  -1.635  30.105  1.00 31.30           N
ATOM    105  CA  ILE A  21      32.736  -2.418  29.325  1.00 31.02           C
ATOM    106  C   ILE A  21      33.404  -1.615  28.202  1.00 30.87           C
ATOM    107  O   ILE A  21      34.594  -1.777  27.950  1.00 31.27           O
ATOM    108  CB  ILE A  21      32.067  -3.740  28.829  1.00 31.23           C
ATOM    109  CG1 ILE A  21      32.623  -4.940  29.605  1.00 30.99           C
ATOM    110  CD1 ILE A  21      31.921  -5.212  30.914  1.00 30.77           C
ATOM    111  CG2 ILE A  21      32.234  -3.966  27.325  1.00 31.85           C
ATOM    112  N   LYS A  22      32.652  -0.737  27.544  1.00 30.35           N
ATOM    113  CA  LYS A  22      33.167  -0.045  26.368  1.00 29.67           C
ATOM    114  C   LYS A  22      32.485   1.303  26.166  1.00 28.92           C
```

FIG. 5B

```
ATOM    115  O   LYS A  22      31.291   1.447  26.430  1.00 28.97           O
ATOM    116  CB  LYS A  22      32.994  -0.944  25.131  1.00 29.91           C
ATOM    117  CG  LYS A  22      33.463  -0.353  23.807  1.00 31.31           C
ATOM    118  CD  LYS A  22      32.584  -0.846  22.663  1.00 33.69           C
ATOM    119  CE  LYS A  22      32.824  -0.061  21.384  1.00 34.84           C
ATOM    120  NZ  LYS A  22      33.873  -0.701  20.548  1.00 35.55           N
ATOM    121  N   VAL A  23      33.247   2.291  25.702  1.00 27.85           N
ATOM    122  CA  VAL A  23      32.673   3.572  25.319  1.00 26.80           C
ATOM    123  C   VAL A  23      31.989   3.441  23.955  1.00 26.47           C
ATOM    124  O   VAL A  23      32.578   2.927  23.007  1.00 26.06           O
ATOM    125  CB  VAL A  23      33.731   4.714  25.304  1.00 27.14           C
ATOM    126  CG1 VAL A  23      33.159   5.975  24.668  1.00 25.33           C
ATOM    127  CG2 VAL A  23      34.220   5.013  26.709  1.00 25.82           C
ATOM    128  N   LEU A  24      30.736   3.889  23.882  1.00 26.11           N
ATOM    129  CA  LEU A  24      29.947   3.842  22.655  1.00 25.98           C
ATOM    130  C   LEU A  24      29.745   5.224  22.047  1.00 26.08           C
ATOM    131  O   LEU A  24      29.515   5.356  20.841  1.00 26.32           O
ATOM    132  CB  LEU A  24      28.572   3.243  22.929  1.00 26.10           C
ATOM    133  CG  LEU A  24      28.399   1.794  23.364  1.00 26.00           C
ATOM    134  CD1 LEU A  24      26.914   1.572  23.585  1.00 25.49           C
ATOM    135  CD2 LEU A  24      28.954   0.810  22.341  1.00 25.35           C
ATOM    136  N   GLY A  25      29.809   6.249  22.888  1.00 25.98           N
ATOM    137  CA  GLY A  25      29.611   7.607  22.440  1.00 26.07           C
ATOM    138  C   GLY A  25      29.361   8.580  23.571  1.00 26.33           C
ATOM    139  O   GLY A  25      29.640   8.284  24.732  1.00 26.03           O
ATOM    140  N   SER A  26      28.829   9.746  23.214  1.00 26.48           N
ATOM    141  CA  SER A  26      28.651  10.849  24.150  1.00 27.44           C
ATOM    142  C   SER A  26      27.703  11.912  23.601  1.00 27.82           C
ATOM    143  O   SER A  26      27.468  11.996  22.393  1.00 27.97           O
ATOM    144  CB  SER A  26      30.002  11.488  24.477  1.00 27.22           C
ATOM    145  OG  SER A  26      30.508  12.178  23.346  1.00 28.14           O
ATOM    146  N   GLY A  27      27.160  12.721  24.505  1.00 28.49           N
ATOM    147  CA  GLY A  27      26.332  13.845  24.129  1.00 28.72           C
ATOM    148  C   GLY A  27      26.493  14.972  25.122  1.00 29.64           C
ATOM    149  O   GLY A  27      27.458  15.007  25.902  1.00 29.14           O
ATOM    150  N   ALA A  28      25.531  15.893  25.091  1.00 30.01           N
ATOM    151  CA  ALA A  28      25.513  17.052  25.970  1.00 30.43           C
ATOM    152  C   ALA A  28      25.262  16.704  27.442  1.00 30.90           C
ATOM    153  O   ALA A  28      25.416  17.561  28.307  1.00 31.78           O
ATOM    154  CB  ALA A  28      24.475  18.063  25.477  1.00 30.69           C
ATOM    155  N   PHE A  29      24.888  15.458  27.729  1.00 30.85           N
ATOM    156  CA  PHE A  29      24.550  15.066  29.097  1.00 31.31           C
ATOM    157  C   PHE A  29      25.490  14.028  29.714  1.00 30.84           C
ATOM    158  O   PHE A  29      25.353  13.681  30.887  1.00 30.79           O
ATOM    159  CB  PHE A  29      23.087  14.616  29.184  1.00 31.85           C
ATOM    160  CG  PHE A  29      22.111  15.610  28.605  1.00 33.49           C
ATOM    161  CD1 PHE A  29      22.080  16.928  29.063  1.00 34.55           C
ATOM    162  CE1 PHE A  29      21.182  17.851  28.532  1.00 34.83           C
ATOM    163  CZ  PHE A  29      20.307  17.462  27.528  1.00 34.78           C
ATOM    164  CE2 PHE A  29      20.325  16.147  27.062  1.00 35.55           C
ATOM    165  CD2 PHE A  29      21.230  15.231  27.598  1.00 34.07           C
ATOM    166  N   GLY A  30      26.444  13.540  28.930  1.00 30.40           N
ATOM    167  CA  GLY A  30      27.493  12.693  29.468  1.00 29.90           C
ATOM    168  C   GLY A  30      28.079  11.704  28.483  1.00 29.36           C
ATOM    169  O   GLY A  30      28.136  11.957  27.278  1.00 29.36           O
ATOM    170  N   THR A  31      28.511  10.566  29.011  1.00 28.32           N
ATOM    171  CA  THR A  31      29.150   9.534  28.213  1.00 27.45           C
ATOM    172  C   THR A  31      28.284   8.286  28.200  1.00 27.34           C
ATOM    173  O   THR A  31      27.704   7.911  29.231  1.00 27.24           O
ATOM    174  CB  THR A  31      30.542   9.214  28.788  1.00 27.08           C
```

FIG. 5C

```
ATOM    175  OG1 THR A  31      31.321  10.418  28.841  1.00 26.63           O
ATOM    176  CG2 THR A  31      31.329   8.308  27.848  1.00 25.44           C
ATOM    177  N   VAL A  32      28.206   7.651  27.034  1.00 26.41           N
ATOM    178  CA  VAL A  32      27.445   6.419  26.881  1.00 26.25           C
ATOM    179  C   VAL A  32      28.392   5.219  26.785  1.00 26.12           C
ATOM    180  O   VAL A  32      29.306   5.188  25.954  1.00 25.73           O
ATOM    181  CB  VAL A  32      26.480   6.464  25.652  1.00 26.51           C
ATOM    182  CG1 VAL A  32      25.591   5.231  25.621  1.00 26.16           C
ATOM    183  CG2 VAL A  32      25.621   7.738  25.659  1.00 26.08           C
ATOM    184  N   TYR A  33      28.152   4.234  27.644  1.00 25.90           N
ATOM    185  CA  TYR A  33      28.914   2.993  27.643  1.00 25.79           C
ATOM    186  C   TYR A  33      28.051   1.802  27.277  1.00 25.73           C
ATOM    187  O   TYR A  33      26.841   1.804  27.488  1.00 25.45           O
ATOM    188  CB  TYR A  33      29.505   2.729  29.024  1.00 25.52           C
ATOM    189  CG  TYR A  33      30.458   3.780  29.518  1.00 25.63           C
ATOM    190  CD1 TYR A  33      29.991   4.976  30.056  1.00 26.29           C
ATOM    191  CE1 TYR A  33      30.872   5.943  30.525  1.00 26.43           C
ATOM    192  CZ  TYR A  33      32.230   5.703  30.455  1.00 26.84           C
ATOM    193  OH  TYR A  33      33.113   6.644  30.912  1.00 28.91           O
ATOM    194  CE2 TYR A  33      32.714   4.524  29.931  1.00 26.56           C
ATOM    195  CD2 TYR A  33      31.833   3.570  29.470  1.00 26.17           C
ATOM    196  N   LYS A  34      28.690   0.780  26.724  1.00 26.11           N
ATOM    197  CA  LYS A  34      28.119  -0.553  26.713  1.00 26.19           C
ATOM    198  C   LYS A  34      28.528  -1.189  28.034  1.00 26.36           C
ATOM    199  O   LYS A  34      29.629  -0.947  28.539  1.00 26.37           O
ATOM    200  CB  LYS A  34      28.647  -1.374  25.536  1.00 26.34           C
ATOM    201  CG  LYS A  34      28.254  -2.854  25.578  1.00 26.67           C
ATOM    202  CD  LYS A  34      28.699  -3.591  24.324  1.00 28.28           C
ATOM    203  CE  LYS A  34      30.209  -3.644  24.207  1.00 28.80           C
ATOM    204  NZ  LYS A  34      30.651  -4.626  23.185  1.00 29.64           N
ATOM    205  N   GLY A  35      27.633  -1.982  28.601  1.00 26.48           N
ATOM    206  CA  GLY A  35      27.916  -2.655  29.846  1.00 27.05           C
ATOM    207  C   GLY A  35      27.283  -4.021  29.931  1.00 27.50           C
ATOM    208  O   GLY A  35      26.579  -4.461  29.016  1.00 27.33           O
ATOM    209  N   LEU A  36      27.569  -4.704  31.031  1.00 28.07           N
ATOM    210  CA  LEU A  36      26.910  -5.965  31.346  1.00 28.83           C
ATOM    211  C   LEU A  36      26.159  -5.815  32.651  1.00 29.31           C
ATOM    212  O   LEU A  36      26.651  -5.203  33.608  1.00 28.70           O
ATOM    213  CB  LEU A  36      27.907  -7.122  31.413  1.00 28.61           C
ATOM    214  CG  LEU A  36      28.522  -7.486  30.057  1.00 29.10           C
ATOM    215  CD1 LEU A  36      29.704  -8.429  30.235  1.00 29.07           C
ATOM    216  CD2 LEU A  36      27.481  -8.074  29.099  1.00 27.73           C
ATOM    217  N   TRP A  37      24.953  -6.366  32.662  1.00 30.29           N
ATOM    218  CA  TRP A  37      24.050  -6.257  33.794  1.00 31.66           C
ATOM    219  C   TRP A  37      23.555  -7.649  34.178  1.00 32.41           C
ATOM    220  O   TRP A  37      23.057  -8.398  33.337  1.00 32.28           O
ATOM    221  CB  TRP A  37      22.885  -5.325  33.431  1.00 31.36           C
ATOM    222  CG  TRP A  37      21.749  -5.309  34.400  1.00 31.84           C
ATOM    223  CD1 TRP A  37      21.827  -5.288  35.765  1.00 31.66           C
ATOM    224  NE1 TRP A  37      20.568  -5.278  36.312  1.00 31.87           N
ATOM    225  CE2 TRP A  37      19.643  -5.284  35.303  1.00 32.18           C
ATOM    226  CD2 TRP A  37      20.355  -5.302  34.080  1.00 32.48           C
ATOM    227  CE3 TRP A  37      19.627  -5.315  32.881  1.00 32.93           C
ATOM    228  CZ3 TRP A  37      18.234  -5.305  32.939  1.00 34.29           C
ATOM    229  CH2 TRP A  37      17.558  -5.288  34.173  1.00 34.07           C
ATOM    230  CZ2 TRP A  37      18.246  -5.275  35.363  1.00 33.37           C
ATOM    231  N   ILE A  38      23.728  -7.998  35.446  1.00 33.59           N
ATOM    232  CA  ILE A  38      23.151  -9.220  35.986  1.00 35.00           C
ATOM    233  C   ILE A  38      21.966  -8.808  36.844  1.00 36.18           C
ATOM    234  O   ILE A  38      22.149  -8.219  37.915  1.00 36.19           O
```

FIG. 5D

```
ATOM    235  CB  ILE A  38      24.198 -10.037  36.802  1.00 35.17           C
ATOM    236  CG1 ILE A  38      25.308 -10.562  35.888  1.00 34.19           C
ATOM    237  CD1 ILE A  38      26.688 -10.346  36.435  1.00 33.99           C
ATOM    238  CG2 ILE A  38      23.532 -11.213  37.543  1.00 35.42           C
ATOM    239  N   PRO A  39      20.755  -9.090  36.362  1.00 37.54           N
ATOM    240  CA  PRO A  39      19.532  -8.772  37.106  1.00 38.74           C
ATOM    241  C   PRO A  39      19.432  -9.599  38.383  1.00 39.96           C
ATOM    242  O   PRO A  39      20.073 -10.652  38.495  1.00 40.58           O
ATOM    243  CB  PRO A  39      18.417  -9.156  36.130  1.00 38.70           C
ATOM    244  CG  PRO A  39      19.070  -9.245  34.812  1.00 38.09           C
ATOM    245  CD  PRO A  39      20.455  -9.737  35.073  1.00 37.80           C
ATOM    246  N   GLU A  40      18.643  -9.114  39.335  1.00 41.45           N
ATOM    247  CA  GLU A  40      18.572  -9.711  40.665  1.00 42.64           C
ATOM    248  C   GLU A  40      17.938 -11.104  40.655  1.00 43.47           C
ATOM    249  O   GLU A  40      16.830 -11.301  40.153  1.00 43.34           O
ATOM    250  CB  GLU A  40      17.836  -8.777  41.630  1.00 42.63           C
ATOM    251  N   GLY A  41      18.668 -12.065  41.211  1.00 44.81           N
ATOM    252  CA  GLY A  41      18.222 -13.444  41.277  1.00 45.93           C
ATOM    253  C   GLY A  41      18.849 -14.292  40.188  1.00 46.56           C
ATOM    254  O   GLY A  41      19.423 -15.345  40.465  1.00 46.81           O
ATOM    255  N   GLU A  42      18.742 -13.817  38.949  1.00 47.24           N
ATOM    256  CA  GLU A  42      19.230 -14.539  37.776  1.00 47.50           C
ATOM    257  C   GLU A  42      20.757 -14.586  37.728  1.00 47.53           C
ATOM    258  O   GLU A  42      21.433 -13.986  38.567  1.00 48.02           O
ATOM    259  CB  GLU A  42      18.664 -13.930  36.489  1.00 47.70           C
ATOM    260  CG  GLU A  42      17.949 -12.598  36.672  1.00 48.46           C
ATOM    261  CD  GLU A  42      16.805 -12.393  35.693  1.00 49.13           C
ATOM    262  OE1 GLU A  42      15.745 -11.880  36.117  1.00 49.77           O
ATOM    263  OE2 GLU A  42      16.960 -12.732  34.500  1.00 49.24           O
ATOM    264  N   LYS A  43      21.293 -15.314  36.753  1.00 47.44           N
ATOM    265  CA  LYS A  43      22.737 -15.466  36.612  1.00 46.89           C
ATOM    266  C   LYS A  43      23.248 -14.807  35.336  1.00 46.48           C
ATOM    267  O   LYS A  43      24.414 -14.406  35.262  1.00 46.92           O
ATOM    268  CB  LYS A  43      23.122 -16.946  36.638  1.00 47.10           C
ATOM    269  N   VAL A  44      22.368 -14.685  34.346  1.00 45.53           N
ATOM    270  CA  VAL A  44      22.731 -14.147  33.037  1.00 44.72           C
ATOM    271  C   VAL A  44      23.259 -12.716  33.085  1.00 43.92           C
ATOM    272  O   VAL A  44      22.697 -11.853  33.775  1.00 44.20           O
ATOM    273  CB  VAL A  44      21.554 -14.197  32.029  1.00 44.84           C
ATOM    274  CG1 VAL A  44      22.026 -14.763  30.704  1.00 44.64           C
ATOM    275  CG2 VAL A  44      20.376 -15.005  32.581  1.00 45.38           C
ATOM    276  N   LYS A  45      24.346 -12.484  32.350  1.00 42.20           N
ATOM    277  CA  LYS A  45      24.859 -11.144  32.113  1.00 40.90           C
ATOM    278  C   LYS A  45      24.220 -10.570  30.847  1.00 39.86           C
ATOM    279  O   LYS A  45      24.362 -11.136  29.758  1.00 39.98           O
ATOM    280  CB  LYS A  45      26.384 -11.163  31.997  1.00 40.99           C
ATOM    281  N   ILE A  46      23.514  -9.450  31.007  1.00 38.25           N
ATOM    282  CA  ILE A  46      22.746  -8.819  29.928  1.00 36.38           C
ATOM    283  C   ILE A  46      23.442  -7.555  29.394  1.00 34.87           C
ATOM    284  O   ILE A  46      23.656  -6.607  30.151  1.00 35.08           O
ATOM    285  CB  ILE A  46      21.309  -8.474  30.421  1.00 36.31           C
ATOM    286  CG1 ILE A  46      20.488  -9.751  30.621  1.00 36.62           C
ATOM    287  CD1 ILE A  46      19.140  -9.537  31.301  1.00 36.72           C
ATOM    288  CG2 ILE A  46      20.603  -7.520  29.446  1.00 36.09           C
ATOM    289  N   PRO A  47      23.794  -7.542  28.104  1.00 33.01           N
ATOM    290  CA  PRO A  47      24.351  -6.338  27.475  1.00 31.20           C
ATOM    291  C   PRO A  47      23.350  -5.179  27.476  1.00 29.44           C
ATOM    292  O   PRO A  47      22.178  -5.343  27.103  1.00 29.35           O
ATOM    293  CB  PRO A  47      24.688  -6.793  26.046  1.00 31.38           C
ATOM    294  CG  PRO A  47      23.887  -8.026  25.818  1.00 32.45           C
```

FIG. 5E

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ATOM    295  CD  PRO A  47      23.714  -8.674  27.161  1.00 33.23           C
ATOM    296  N   VAL A  48      23.823  -4.020  27.922  1.00 26.93           N
ATOM    297  CA  VAL A  48      22.989  -2.832  28.098  1.00 24.82           C
ATOM    298  C   VAL A  48      23.769  -1.576  27.731  1.00 24.03           C
ATOM    299  O   VAL A  48      24.996  -1.607  27.605  1.00 22.88           O
ATOM    300  CB  VAL A  48      22.509  -2.666  29.577  1.00 24.76           C
ATOM    301  CG1 VAL A  48      21.516  -3.761  29.985  1.00 23.63           C
ATOM    302  CG2 VAL A  48      23.700  -2.600  30.544  1.00 23.66           C
ATOM    303  N   ALA A  49      23.049  -0.471  27.578  1.00 22.99           N
ATOM    304  CA  ALA A  49      23.679   0.835  27.509  1.00 22.69           C
ATOM    305  C   ALA A  49      23.653   1.498  28.883  1.00 22.56           C
ATOM    306  O   ALA A  49      22.621   1.525  29.558  1.00 22.34           O
ATOM    307  CB  ALA A  49      22.994   1.720  26.456  1.00 22.34           C
ATOM    308  N   ILE A  50      24.804   2.019  29.290  1.00 23.08           N
ATOM    309  CA  ILE A  50      24.934   2.780  30.530  1.00 23.05           C
ATOM    310  C   ILE A  50      25.331   4.225  30.254  1.00 22.95           C
ATOM    311  O   ILE A  50      26.410   4.497  29.737  1.00 22.99           O
ATOM    312  CB  ILE A  50      25.944   2.122  31.499  1.00 22.68           C
ATOM    313  CG1 ILE A  50      25.600   0.646  31.724  1.00 23.20           C
ATOM    314  CD1 ILE A  50      26.767  -0.183  32.250  1.00 23.10           C
ATOM    315  CG2 ILE A  50      25.983   2.883  32.828  1.00 22.78           C
ATOM    316  N   LYS A  51      24.452   5.144  30.614  1.00 23.57           N
ATOM    317  CA  LYS A  51      24.721   6.564  30.464  1.00 25.45           C
ATOM    318  C   LYS A  51      25.241   7.140  31.790  1.00 26.16           C
ATOM    319  O   LYS A  51      24.565   7.081  32.809  1.00 26.54           O
ATOM    320  CB  LYS A  51      23.457   7.288  29.998  1.00 25.27           C
ATOM    321  CG  LYS A  51      23.718   8.519  29.142  1.00 27.21           C
ATOM    322  N   GLU A  52      26.462   7.659  31.769  1.00 27.10           N
ATOM    323  CA  GLU A  52      27.046   8.307  32.932  1.00 28.25           C
ATOM    324  C   GLU A  52      26.848   9.812  32.796  1.00 28.35           C
ATOM    325  O   GLU A  52      27.412  10.439  31.900  1.00 28.29           O
ATOM    326  CB  GLU A  52      28.538   7.966  33.051  1.00 28.46           C
ATOM    327  CG  GLU A  52      28.883   7.152  34.284  1.00 30.20           C
ATOM    328  CD  GLU A  52      30.303   7.358  34.796  1.00 31.24           C
ATOM    329  OE1 GLU A  52      31.218   7.648  33.998  1.00 32.93           O
ATOM    330  OE2 GLU A  52      30.513   7.203  36.012  1.00 31.33           O
ATOM    331  N   LEU A  53      26.034  10.387  33.675  1.00 29.03           N
ATOM    332  CA  LEU A  53      25.664  11.796  33.553  1.00 29.57           C
ATOM    333  C   LEU A  53      26.732  12.715  34.106  1.00 30.34           C
ATOM    334  O   LEU A  53      27.415  12.382  35.076  1.00 31.05           O
ATOM    335  CB  LEU A  53      24.328  12.083  34.245  1.00 29.20           C
ATOM    336  CG  LEU A  53      23.069  11.285  33.895  1.00 28.26           C
ATOM    337  CD1 LEU A  53      21.861  11.971  34.515  1.00 26.83           C
ATOM    338  CD2 LEU A  53      22.879  11.103  32.389  1.00 28.29           C
ATOM    339  N   ARG A  54      26.870  13.875  33.474  1.00 31.28           N
ATOM    340  CA  ARG A  54      27.786  14.916  33.928  1.00 31.73           C
ATOM    341  C   ARG A  54      27.358  15.412  35.308  1.00 32.02           C
ATOM    342  O   ARG A  54      26.163  15.592  35.562  1.00 32.31           O
ATOM    343  CB  ARG A  54      27.789  16.080  32.931  1.00 31.78           C
ATOM    344  N   SER A  58      19.539  24.051  39.068  1.00 50.63           N
ATOM    345  CA  SER A  58      20.284  23.063  38.287  1.00 50.22           C
ATOM    346  C   SER A  58      20.680  21.820  39.109  1.00 49.81           C
ATOM    347  O   SER A  58      20.399  20.698  38.676  1.00 50.12           O
ATOM    348  CB  SER A  58      21.494  23.706  37.597  1.00 50.55           C
ATOM    349  OG  SER A  58      21.122  24.917  36.951  1.00 51.16           O
ATOM    350  N   PRO A  59      21.322  21.991  40.270  1.00 48.85           N
ATOM    351  CA  PRO A  59      21.537  20.860  41.182  1.00 48.01           C
ATOM    352  C   PRO A  59      20.206  20.364  41.754  1.00 46.81           C
ATOM    353  O   PRO A  59      19.345  21.180  42.112  1.00 46.82           O
ATOM    354  CB  PRO A  59      22.412  21.459  42.287  1.00 48.31           C
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FIG. 5F

```
ATOM    355  CG  PRO A  59      23.010  22.670  41.671  1.00 48.96           C
ATOM    356  CD  PRO A  59      21.917  23.228  40.807  1.00 49.26           C
ATOM    357  N   LYS A  60      20.048  19.044  41.827  1.00 44.81           N
ATOM    358  CA  LYS A  60      18.764  18.438  42.154  1.00 43.01           C
ATOM    359  C   LYS A  60      18.870  17.419  43.282  1.00 41.79           C
ATOM    360  O   LYS A  60      19.883  16.735  43.424  1.00 41.70           O
ATOM    361  CB  LYS A  60      18.167  17.775  40.910  1.00 43.20           C
ATOM    362  N   ALA A  61      17.813  17.327  44.081  1.00 40.01           N
ATOM    363  CA  ALA A  61      17.735  16.332  45.136  1.00 38.28           C
ATOM    364  C   ALA A  61      17.434  14.973  44.528  1.00 37.38           C
ATOM    365  O   ALA A  61      16.747  14.881  43.500  1.00 37.44           O
ATOM    366  CB  ALA A  61      16.669  16.706  46.138  1.00 38.33           C
ATOM    367  N   ASN A  62      17.941  13.927  45.173  1.00 35.32           N
ATOM    368  CA  ASN A  62      17.749  12.557  44.711  1.00 33.87           C
ATOM    369  C   ASN A  62      16.283  12.160  44.575  1.00 33.26           C
ATOM    370  O   ASN A  62      15.938  11.369  43.700  1.00 32.65           O
ATOM    371  CB  ASN A  62      18.504  11.575  45.613  1.00 33.16           C
ATOM    372  CG  ASN A  62      20.007  11.672  45.443  1.00 31.36           C
ATOM    373  OD1 ASN A  62      20.495  12.030  44.378  1.00 29.55           O
ATOM    374  ND2 ASN A  62      20.748  11.355  46.497  1.00 30.76           N
ATOM    375  N   LYS A  63      15.433  12.716  45.439  1.00 32.87           N
ATOM    376  CA  LYS A  63      13.982  12.535  45.347  1.00 32.57           C
ATOM    377  C   LYS A  63      13.442  13.039  44.003  1.00 31.95           C
ATOM    378  O   LYS A  63      12.674  12.340  43.341  1.00 31.76           O
ATOM    379  CB  LYS A  63      13.274  13.242  46.508  1.00 32.63           C
ATOM    380  CG  LYS A  63      11.799  12.903  46.642  1.00 33.34           C
ATOM    381  CD  LYS A  63      10.922  14.062  46.192  1.00 34.80           C
ATOM    382  CE  LYS A  63       9.510  13.959  46.760  1.00 35.00           C
ATOM    383  NZ  LYS A  63       8.667  12.959  46.037  1.00 34.41           N
ATOM    384  N   GLU A  64      13.866  14.243  43.611  1.00 31.60           N
ATOM    385  CA  GLU A  64      13.473  14.856  42.335  1.00 31.29           C
ATOM    386  C   GLU A  64      13.942  14.008  41.151  1.00 30.22           C
ATOM    387  O   GLU A  64      13.179  13.774  40.211  1.00 30.16           O
ATOM    388  CB  GLU A  64      14.009  16.297  42.217  1.00 31.90           C
ATOM    389  CG  GLU A  64      13.717  17.185  43.426  1.00 34.19           C
ATOM    390  CD  GLU A  64      14.354  18.563  43.325  1.00 36.57           C
ATOM    391  OE1 GLU A  64      15.584  18.684  43.535  1.00 37.30           O
ATOM    392  OE2 GLU A  64      13.621  19.535  43.044  1.00 38.23           O
ATOM    393  N   ILE A  65      15.183  13.527  41.221  1.00 29.20           N
ATOM    394  CA  ILE A  65      15.747  12.657  40.185  1.00 28.46           C
ATOM    395  C   ILE A  65      14.981  11.335  40.055  1.00 27.91           C
ATOM    396  O   ILE A  65      14.675  10.903  38.942  1.00 27.51           O
ATOM    397  CB  ILE A  65      17.264  12.419  40.417  1.00 28.67           C
ATOM    398  CG1 ILE A  65      18.038  13.741  40.273  1.00 28.41           C
ATOM    399  CD1 ILE A  65      19.425  13.732  40.880  1.00 27.82           C
ATOM    400  CG2 ILE A  65      17.811  11.343  39.452  1.00 28.82           C
ATOM    401  N   LEU A  66      14.651  10.711  41.184  1.00 27.42           N
ATOM    402  CA  LEU A  66      13.949   9.422  41.159  1.00 27.61           C
ATOM    403  C   LEU A  66      12.507   9.539  40.657  1.00 27.13           C
ATOM    404  O   LEU A  66      12.043   8.676  39.907  1.00 27.11           O
ATOM    405  CB  LEU A  66      14.007   8.712  42.516  1.00 27.31           C
ATOM    406  CG  LEU A  66      15.374   8.154  42.929  1.00 27.72           C
ATOM    407  CD1 LEU A  66      15.389   7.907  44.416  1.00 27.05           C
ATOM    408  CD2 LEU A  66      15.748   6.881  42.168  1.00 27.26           C
ATOM    409  N   ASP A  67      11.822  10.612  41.056  1.00 27.04           N
ATOM    410  CA  ASP A  67      10.485  10.940  40.539  1.00 26.69           C
ATOM    411  C   ASP A  67      10.494  11.086  39.018  1.00 25.69           C
ATOM    412  O   ASP A  67       9.629  10.548  38.332  1.00 25.85           O
ATOM    413  CB  ASP A  67       9.971  12.239  41.162  1.00 27.16           C
ATOM    414  CG  ASP A  67       9.361  12.032  42.539  1.00 29.29           C
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FIG. 5G

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ATOM    415  OD1 ASP A  67       8.972  10.886  42.875  1.00 29.74           O
ATOM    416  OD2 ASP A  67       9.231  12.974  43.354  1.00 30.45           O
ATOM    417  N   GLU A  68      11.468  11.832  38.508  1.00 24.70           N
ATOM    418  CA  GLU A  68      11.726  11.918  37.073  1.00 24.03           C
ATOM    419  C   GLU A  68      11.972  10.533  36.470  1.00 23.27           C
ATOM    420  O   GLU A  68      11.312  10.152  35.509  1.00 23.42           O
ATOM    421  CB  GLU A  68      12.923  12.834  36.801  1.00 23.85           C
ATOM    422  CG  GLU A  68      12.592  14.319  36.917  1.00 25.07           C
ATOM    423  N   ALA A  69      12.896   9.776  37.064  1.00 22.26           N
ATOM    424  CA  ALA A  69      13.280   8.456  36.557  1.00 21.45           C
ATOM    425  C   ALA A  69      12.112   7.455  36.455  1.00 21.00           C
ATOM    426  O   ALA A  69      12.124   6.560  35.607  1.00 20.28           O
ATOM    427  CB  ALA A  69      14.426   7.876  37.396  1.00 21.07           C
ATOM    428  N   TYR A  70      11.115   7.612  37.325  1.00 20.80           N
ATOM    429  CA  TYR A  70       9.941   6.744  37.324  1.00 20.38           C
ATOM    430  C   TYR A  70       9.068   6.998  36.099  1.00 19.92           C
ATOM    431  O   TYR A  70       8.530   6.061  35.499  1.00 19.47           O
ATOM    432  CB  TYR A  70       9.127   6.937  38.608  1.00 20.99           C
ATOM    433  N   VAL A  71       8.942   8.269  35.723  1.00 19.60           N
ATOM    434  CA  VAL A  71       8.214   8.643  34.509  1.00 19.21           C
ATOM    435  C   VAL A  71       8.933   8.051  33.287  1.00 19.25           C
ATOM    436  O   VAL A  71       8.305   7.430  32.434  1.00 19.48           O
ATOM    437  CB  VAL A  71       8.023  10.184  34.414  1.00 19.46           C
ATOM    438  CG1 VAL A  71       7.482  10.609  33.047  1.00 19.14           C
ATOM    439  CG2 VAL A  71       7.092  10.683  35.550  1.00 18.30           C
ATOM    440  N   MET A  72      10.253   8.195  33.245  1.00 19.41           N
ATOM    441  CA  MET A  72      11.070   7.693  32.135  1.00 20.02           C
ATOM    442  C   MET A  72      11.009   6.176  32.013  1.00 20.27           C
ATOM    443  O   MET A  72      11.137   5.632  30.910  1.00 19.98           O
ATOM    444  CB  MET A  72      12.529   8.125  32.307  1.00 19.83           C
ATOM    445  CG  MET A  72      12.760   9.615  32.117  1.00 20.80           C
ATOM    446  SD  MET A  72      14.129  10.241  33.089  1.00 22.57           S
ATOM    447  CE  MET A  72      15.484   9.837  32.011  1.00 20.49           C
ATOM    448  N   ALA A  73      10.831   5.515  33.157  1.00 20.62           N
ATOM    449  CA  ALA A  73      10.760   4.065  33.249  1.00 21.88           C
ATOM    450  C   ALA A  73       9.353   3.539  32.973  1.00 22.79           C
ATOM    451  O   ALA A  73       9.170   2.338  32.767  1.00 23.39           O
ATOM    452  CB  ALA A  73      11.225   3.611  34.622  1.00 22.42           C
ATOM    453  N   SER A  74       8.372   4.444  32.974  1.00 22.94           N
ATOM    454  CA  SER A  74       6.981   4.114  32.677  1.00 22.93           C
ATOM    455  C   SER A  74       6.666   4.201  31.183  1.00 23.31           C
ATOM    456  O   SER A  74       5.573   3.811  30.757  1.00 23.60           O
ATOM    457  CB  SER A  74       6.040   5.040  33.452  1.00 23.30           C
ATOM    458  OG  SER A  74       5.894   6.301  32.805  1.00 22.24           O
ATOM    459  N   VAL A  75       7.616   4.713  30.398  1.00 23.17           N
ATOM    460  CA  VAL A  75       7.438   4.856  28.951  1.00 22.82           C
ATOM    461  C   VAL A  75       7.548   3.496  28.264  1.00 22.84           C
ATOM    462  O   VAL A  75       8.611   2.887  28.224  1.00 23.12           O
ATOM    463  CB  VAL A  75       8.428   5.885  28.331  1.00 23.28           C
ATOM    464  CG1 VAL A  75       8.446   5.776  26.813  1.00 22.51           C
ATOM    465  CG2 VAL A  75       8.067   7.308  28.746  1.00 21.50           C
ATOM    466  N   ASP A  76       6.427   3.034  27.720  1.00 22.57           N
ATOM    467  CA  ASP A  76       6.309   1.693  27.173  1.00 21.55           C
ATOM    468  C   ASP A  76       5.786   1.788  25.747  1.00 20.62           C
ATOM    469  O   ASP A  76       4.584   1.803  25.521  1.00 19.62           O
ATOM    470  CB  ASP A  76       5.378   0.861  28.068  1.00 22.23           C
ATOM    471  CG  ASP A  76       5.120  -0.550  27.526  1.00 24.21           C
ATOM    472  OD1 ASP A  76       6.014  -1.140  26.878  1.00 24.17           O
ATOM    473  OD2 ASP A  76       4.039  -1.152  27.719  1.00 26.10           O
ATOM    474  N   ASN A  77       6.714   1.872  24.791  1.00 20.02           N
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FIG. 5H

```
ATOM    475  CA  ASN A  77       6.391   1.994  23.371  1.00 18.19           C
ATOM    476  C   ASN A  77       7.530   1.436  22.523  1.00 17.44           C
ATOM    477  O   ASN A  77       8.688   1.648  22.847  1.00 17.56           O
ATOM    478  CB  ASN A  77       6.136   3.462  23.007  1.00 18.47           C
ATOM    479  CG  ASN A  77       5.657   3.636  21.579  1.00 17.62           C
ATOM    480  OD1 ASN A  77       6.447   3.827  20.662  1.00 18.29           O
ATOM    481  ND2 ASN A  77       4.361   3.542  21.387  1.00 18.96           N
ATOM    482  N   PRO A  78       7.214   0.713  21.449  1.00 16.86           N
ATOM    483  CA  PRO A  78       8.250   0.094  20.612  1.00 16.27           C
ATOM    484  C   PRO A  78       9.247   1.093  20.020  1.00 16.15           C
ATOM    485  O   PRO A  78      10.343   0.677  19.660  1.00 15.86           O
ATOM    486  CB  PRO A  78       7.444  -0.575  19.492  1.00 16.03           C
ATOM    487  CG  PRO A  78       6.119  -0.815  20.098  1.00 17.12           C
ATOM    488  CD  PRO A  78       5.857   0.399  20.958  1.00 16.41           C
ATOM    489  N   HIS A  79       8.886   2.374  19.946  1.00 15.40           N
ATOM    490  CA  HIS A  79       9.760   3.365  19.333  1.00 15.22           C
ATOM    491  C   HIS A  79      10.233   4.450  20.297  1.00 15.68           C
ATOM    492  O   HIS A  79      10.677   5.519  19.863  1.00 15.57           O
ATOM    493  CB  HIS A  79       9.092   3.955  18.080  1.00 15.62           C
ATOM    494  CG  HIS A  79       8.611   2.909  17.121  1.00 15.43           C
ATOM    495  ND1 HIS A  79       9.474   2.093  16.420  1.00 16.86           N
ATOM    496  CE1 HIS A  79       8.777   1.247  15.683  1.00 16.30           C
ATOM    497  NE2 HIS A  79       7.492   1.477  15.891  1.00 16.57           N
ATOM    498  CD2 HIS A  79       7.361   2.501  16.798  1.00 15.31           C
ATOM    499  N   VAL A  80      10.135   4.181  21.602  1.00 15.49           N
ATOM    500  CA  VAL A  80      10.721   5.065  22.609  1.00 16.60           C
ATOM    501  C   VAL A  80      11.506   4.255  23.635  1.00 17.50           C
ATOM    502  O   VAL A  80      11.006   3.268  24.169  1.00 18.27           O
ATOM    503  CB  VAL A  80       9.679   5.995  23.325  1.00 16.27           C
ATOM    504  CG1 VAL A  80      10.387   7.097  24.114  1.00 14.48           C
ATOM    505  CG2 VAL A  80       8.725   6.640  22.335  1.00 16.07           C
ATOM    506  N   CYS A  81      12.742   4.667  23.895  1.00 18.30           N
ATOM    507  CA  CYS A  81      13.580   3.985  24.873  1.00 19.69           C
ATOM    508  C   CYS A  81      13.018   4.154  26.275  1.00 19.91           C
ATOM    509  O   CYS A  81      12.730   5.276  26.707  1.00 20.18           O
ATOM    510  CB  CYS A  81      15.003   4.531  24.822  1.00 20.00           C
ATOM    511  SG  CYS A  81      15.814   4.263  23.228  1.00 23.58           S
ATOM    512  N   ARG A  82      12.841   3.044  26.985  1.00 20.26           N
ATOM    513  CA  ARG A  82      12.472   3.139  28.388  1.00 20.30           C
ATOM    514  C   ARG A  82      13.690   3.034  29.290  1.00 19.96           C
ATOM    515  O   ARG A  82      14.624   2.295  29.009  1.00 19.48           O
ATOM    516  CB  ARG A  82      11.384   2.137  28.790  1.00 20.37           C
ATOM    517  CG  ARG A  82      11.583   0.694  28.375  1.00 22.08           C
ATOM    518  CD  ARG A  82      10.731  -0.305  29.198  1.00 22.79           C
ATOM    519  NE  ARG A  82      10.607   0.134  30.585  1.00 23.81           N
ATOM    520  CZ  ARG A  82      10.972  -0.573  31.651  1.00 24.16           C
ATOM    521  NH1 ARG A  82      10.831  -0.052  32.865  1.00 23.28           N
ATOM    522  NH2 ARG A  82      11.465  -1.798  31.515  1.00 24.76           N
ATOM    523  N   LEU A  83      13.674   3.812  30.361  1.00 19.66           N
ATOM    524  CA  LEU A  83      14.679   3.694  31.393  1.00 19.40           C
ATOM    525  C   LEU A  83      14.452   2.359  32.110  1.00 19.16           C
ATOM    526  O   LEU A  83      13.349   2.087  32.567  1.00 19.07           O
ATOM    527  CB  LEU A  83      14.591   4.886  32.371  1.00 18.78           C
ATOM    528  CG  LEU A  83      15.713   4.943  33.418  1.00 18.61           C
ATOM    529  CD1 LEU A  83      17.054   4.993  32.737  1.00 17.65           C
ATOM    530  CD2 LEU A  83      15.569   6.108  34.392  1.00 18.78           C
ATOM    531  N   LEU A  84      15.479   1.515  32.171  1.00 19.27           N
ATOM    532  CA  LEU A  84      15.361   0.260  32.907  1.00 19.61           C
ATOM    533  C   LEU A  84      15.807   0.471  34.347  1.00 19.11           C
ATOM    534  O   LEU A  84      15.124   0.067  35.287  1.00 19.28           O
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FIG. 5I

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ATOM    535  CB  LEU A  84      16.189  -0.870  32.262  1.00 19.77           C
ATOM    536  CG  LEU A  84      15.880  -1.353  30.845  1.00 21.49           C
ATOM    537  CD1 LEU A  84      16.915  -2.373  30.424  1.00 22.18           C
ATOM    538  CD2 LEU A  84      14.481  -1.930  30.708  1.00 22.51           C
ATOM    539  N   GLY A  85      16.962   1.104  34.509  1.00 18.77           N
ATOM    540  CA  GLY A  85      17.590   1.215  35.809  1.00 18.72           C
ATOM    541  C   GLY A  85      18.286   2.531  36.053  1.00 18.38           C
ATOM    542  O   GLY A  85      18.658   3.235  35.115  1.00 17.12           O
ATOM    543  N   ILE A  86      18.440   2.855  37.336  1.00 19.45           N
ATOM    544  CA  ILE A  86      19.195   4.021  37.785  1.00 20.39           C
ATOM    545  C   ILE A  86      20.125   3.611  38.930  1.00 21.45           C
ATOM    546  O   ILE A  86      19.751   2.830  39.805  1.00 21.92           O
ATOM    547  CB  ILE A  86      18.235   5.196  38.183  1.00 20.35           C
ATOM    548  CG1 ILE A  86      19.007   6.491  38.463  1.00 19.99           C
ATOM    549  CD1 ILE A  86      18.243   7.731  38.107  1.00 18.21           C
ATOM    550  CG2 ILE A  86      17.335   4.827  39.368  1.00 20.52           C
ATOM    551  N   CYS A  87      21.352   4.114  38.896  1.00 22.72           N
ATOM    552  CA  CYS A  87      22.290   3.933  39.995  1.00 23.21           C
ATOM    553  C   CYS A  87      22.778   5.301  40.444  1.00 23.80           C
ATOM    554  O   CYS A  87      23.266   6.091  39.634  1.00 23.86           O
ATOM    555  CB  CYS A  87      23.471   3.059  39.571  1.00 23.19           C
ATOM    556  SG  CYS A  87      24.669   2.712  40.888  1.00 23.58           S
ATOM    557  N   LEU A  88      22.622   5.581  41.733  1.00 24.63           N
ATOM    558  CA  LEU A  88      23.062   6.850  42.309  1.00 25.54           C
ATOM    559  C   LEU A  88      24.330   6.629  43.127  1.00 25.98           C
ATOM    560  O   LEU A  88      24.276   6.159  44.266  1.00 25.49           O
ATOM    561  CB  LEU A  88      21.970   7.473  43.189  1.00 25.32           C
ATOM    562  CG  LEU A  88      20.586   7.790  42.606  1.00 26.58           C
ATOM    563  CD1 LEU A  88      19.607   8.152  43.740  1.00 25.60           C
ATOM    564  CD2 LEU A  88      20.646   8.908  41.557  1.00 25.45           C
ATOM    565  N   THR A  89      25.468   6.943  42.522  1.00 26.50           N
ATOM    566  CA  THR A  89      26.744   6.913  43.218  1.00 27.70           C
ATOM    567  C   THR A  89      27.369   8.308  43.149  1.00 28.02           C
ATOM    568  O   THR A  89      26.653   9.312  43.193  1.00 28.36           O
ATOM    569  CB  THR A  89      27.672   5.834  42.620  1.00 27.79           C
ATOM    570  OG1 THR A  89      27.458   5.734  41.204  1.00 29.61           O
ATOM    571  CG2 THR A  89      27.272   4.468  43.118  1.00 28.40           C
ATOM    572  N   SER A  90      28.694   8.368  43.047  1.00 28.36           N
ATOM    573  CA  SER A  90      29.411   9.613  42.768  1.00 28.77           C
ATOM    574  C   SER A  90      28.861  10.319  41.530  1.00 28.51           C
ATOM    575  O   SER A  90      28.874  11.546  41.446  1.00 29.21           O
ATOM    576  CB  SER A  90      30.895   9.321  42.571  1.00 28.96           C
ATOM    577  OG  SER A  90      31.140   7.923  42.627  1.00 30.78           O
ATOM    578  N   THR A  91      28.390   9.528  40.571  1.00 27.93           N
ATOM    579  CA  THR A  91      27.723  10.034  39.382  1.00 26.94           C
ATOM    580  C   THR A  91      26.376   9.350  39.296  1.00 26.44           C
ATOM    581  O   THR A  91      26.204   8.244  39.821  1.00 26.63           O
ATOM    582  CB  THR A  91      28.533   9.684  38.104  1.00 27.12           C
ATOM    583  OG1 THR A  91      28.800   8.277  38.078  1.00 26.60           O
ATOM    584  CG2 THR A  91      29.933  10.314  38.127  1.00 26.50           C
ATOM    585  N   VAL A  92      25.425  10.009  38.637  1.00 25.44           N
ATOM    586  CA  VAL A  92      24.182   9.366  38.231  1.00 24.57           C
ATOM    587  C   VAL A  92      24.460   8.515  36.983  1.00 24.00           C
ATOM    588  O   VAL A  92      25.054   8.999  36.023  1.00 23.88           O
ATOM    589  CB  VAL A  92      23.071  10.404  37.946  1.00 24.61           C
ATOM    590  CG1 VAL A  92      21.773   9.725  37.520  1.00 24.41           C
ATOM    591  CG2 VAL A  92      22.823  11.269  39.171  1.00 24.70           C
ATOM    592  N   GLN A  93      24.056   7.246  37.015  1.00 23.07           N
ATOM    593  CA  GLN A  93      24.162   6.369  35.847  1.00 22.58           C
ATOM    594  C   GLN A  93      22.795   5.817  35.465  1.00 22.04           C
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FIG. 5J

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ATOM    595  O   GLN A  93      22.053   5.334  36.325  1.00 21.73           O
ATOM    596  CB  GLN A  93      25.151   5.225  36.098  1.00 22.93           C
ATOM    597  CG  GLN A  93      26.586   5.683  36.290  1.00 24.03           C
ATOM    598  CD  GLN A  93      27.520   4.555  36.652  1.00 25.78           C
ATOM    599  OE1 GLN A  93      28.106   3.920  35.777  1.00 28.14           O
ATOM    600  NE2 GLN A  93      27.667   4.301  37.936  1.00 26.44           N
ATOM    601  N   LEU A  94      22.456   5.916  34.179  1.00 21.75           N
ATOM    602  CA  LEU A  94      21.175   5.418  33.674  1.00 21.57           C
ATOM    603  C   LEU A  94      21.389   4.198  32.805  1.00 21.40           C
ATOM    604  O   LEU A  94      22.333   4.154  32.026  1.00 20.98           O
ATOM    605  CB  LEU A  94      20.418   6.496  32.889  1.00 21.58           C
ATOM    606  CG  LEU A  94      20.199   7.878  33.508  1.00 21.61           C
ATOM    607  CD1 LEU A  94      19.322   8.735  32.596  1.00 22.05           C
ATOM    608  CD2 LEU A  94      19.612   7.803  34.911  1.00 20.53           C
ATOM    609  N   ILE A  95      20.499   3.216  32.944  1.00 21.48           N
ATOM    610  CA  ILE A  95      20.665   1.914  32.303  1.00 21.10           C
ATOM    611  C   ILE A  95      19.498   1.622  31.350  1.00 21.34           C
ATOM    612  O   ILE A  95      18.327   1.671  31.751  1.00 22.01           O
ATOM    613  CB  ILE A  95      20.843   0.797  33.378  1.00 21.27           C
ATOM    614  CG1 ILE A  95      22.148   1.007  34.167  1.00 22.39           C
ATOM    615  CD1 ILE A  95      21.982   1.673  35.535  1.00 21.44           C
ATOM    616  CG2 ILE A  95      20.867  -0.602  32.748  1.00 19.87           C
ATOM    617  N   THR A  96      19.825   1.341  30.090  1.00 20.59           N
ATOM    618  CA  THR A  96      18.813   1.072  29.061  1.00 21.13           C
ATOM    619  C   THR A  96      19.181  -0.143  28.219  1.00 21.31           C
ATOM    620  O   THR A  96      20.293  -0.672  28.311  1.00 21.68           O
ATOM    621  CB  THR A  96      18.605   2.301  28.117  1.00 20.82           C
ATOM    622  OG1 THR A  96      19.871   2.759  27.619  1.00 20.52           O
ATOM    623  CG2 THR A  96      18.061   3.502  28.868  1.00 19.81           C
ATOM    624  N   GLN A  97      18.241  -0.576  27.391  1.00 21.60           N
ATOM    625  CA  GLN A  97      18.507  -1.619  26.413  1.00 21.95           C
ATOM    626  C   GLN A  97      19.525  -1.113  25.383  1.00 21.61           C
ATOM    627  O   GLN A  97      19.402   0.002  24.872  1.00 21.52           O
ATOM    628  CB  GLN A  97      17.201  -2.033  25.729  1.00 22.65           C
ATOM    629  CG  GLN A  97      17.345  -3.175  24.729  1.00 25.42           C
ATOM    630  CD  GLN A  97      16.024  -3.602  24.125  1.00 27.64           C
ATOM    631  OE1 GLN A  97      15.306  -2.789  23.542  1.00 30.44           O
ATOM    632  NE2 GLN A  97      15.702  -4.879  24.253  1.00 28.73           N
ATOM    633  N   LEU A  98      20.526  -1.935  25.089  1.00 21.21           N
ATOM    634  CA  LEU A  98      21.557  -1.586  24.120  1.00 21.22           C
ATOM    635  C   LEU A  98      20.970  -1.528  22.715  1.00 20.98           C
ATOM    636  O   LEU A  98      20.366  -2.488  22.254  1.00 20.92           O
ATOM    637  CB  LEU A  98      22.715  -2.592  24.169  1.00 21.47           C
ATOM    638  CG  LEU A  98      23.869  -2.369  23.184  1.00 21.69           C
ATOM    639  CD1 LEU A  98      24.765  -1.243  23.669  1.00 22.47           C
ATOM    640  CD2 LEU A  98      24.689  -3.650  22.959  1.00 21.77           C
ATOM    641  N   MET A  99      21.131  -0.384  22.060  1.00 20.84           N
ATOM    642  CA  MET A  99      20.710  -0.211  20.679  1.00 20.64           C
ATOM    643  C   MET A  99      21.974  -0.336  19.848  1.00 20.57           C
ATOM    644  O   MET A  99      22.689   0.646  19.639  1.00 20.89           O
ATOM    645  CB  MET A  99      20.041   1.156  20.477  1.00 20.96           C
ATOM    646  CG  MET A  99      18.836   1.406  21.382  1.00 21.84           C
ATOM    647  SD  MET A  99      17.421   0.417  20.855  1.00 24.46           S
ATOM    648  CE  MET A  99      16.831  -0.214  22.362  1.00 23.27           C
ATOM    649  N   PRO A 100      22.246  -1.555  19.383  1.00 20.44           N
ATOM    650  CA  PRO A 100      23.590  -1.941  18.929  1.00 20.46           C
ATOM    651  C   PRO A 100      24.080  -1.273  17.648  1.00 20.46           C
ATOM    652  O   PRO A 100      25.259  -1.373  17.334  1.00 21.31           O
ATOM    653  CB  PRO A 100      23.465  -3.455  18.724  1.00 20.75           C
ATOM    654  CG  PRO A 100      22.030  -3.683  18.442  1.00 20.42           C
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FIG. 5K

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ATOM    655  CD  PRO A 100      21.282  -2.665  19.259  1.00 20.01           C
ATOM    656  N   PHE A 101      23.200  -0.600  16.925  1.00 20.55           N
ATOM    657  CA  PHE A 101      23.598   0.075  15.694  1.00 19.71           C
ATOM    658  C   PHE A 101      23.906   1.557  15.917  1.00 19.31           C
ATOM    659  O   PHE A 101      24.315   2.251  14.987  1.00 19.85           O
ATOM    660  CB  PHE A 101      22.531  -0.112  14.610  1.00 19.90           C
ATOM    661  CG  PHE A 101      22.474  -1.507  14.040  1.00 18.56           C
ATOM    662  CD1 PHE A 101      23.169  -1.824  12.883  1.00 19.54           C
ATOM    663  CE1 PHE A 101      23.119  -3.114  12.337  1.00 20.06           C
ATOM    664  CZ  PHE A 101      22.360  -4.098  12.957  1.00 21.11           C
ATOM    665  CE2 PHE A 101      21.653  -3.789  14.129  1.00 21.19           C
ATOM    666  CD2 PHE A 101      21.715  -2.493  14.654  1.00 19.92           C
ATOM    667  N   GLY A 102      23.724   2.029  17.149  1.00 18.54           N
ATOM    668  CA  GLY A 102      24.049   3.399  17.509  1.00 18.28           C
ATOM    669  C   GLY A 102      22.976   4.405  17.128  1.00 18.17           C
ATOM    670  O   GLY A 102      21.804   4.045  16.960  1.00 17.69           O
ATOM    671  N   CYS A 103      23.364   5.672  16.990  1.00 17.96           N
ATOM    672  CA  CYS A 103      22.384   6.703  16.660  1.00 18.60           C
ATOM    673  C   CYS A 103      22.111   6.792  15.160  1.00 18.16           C
ATOM    674  O   CYS A 103      22.958   6.436  14.332  1.00 17.63           O
ATOM    675  CB  CYS A 103      22.705   8.056  17.314  1.00 18.88           C
ATOM    676  SG  CYS A 103      23.933   9.125  16.540  1.00 23.76           S
ATOM    677  N   LEU A 104      20.899   7.225  14.824  1.00 18.08           N
ATOM    678  CA  LEU A 104      20.456   7.283  13.432  1.00 18.04           C
ATOM    679  C   LEU A 104      21.243   8.286  12.604  1.00 17.84           C
ATOM    680  O   LEU A 104      21.523   8.039  11.436  1.00 17.15           O
ATOM    681  CB  LEU A 104      18.954   7.567  13.350  1.00 18.23           C
ATOM    682  CG  LEU A 104      18.217   7.360  12.021  1.00 17.77           C
ATOM    683  CD1 LEU A 104      18.632   6.090  11.306  1.00 18.61           C
ATOM    684  CD2 LEU A 104      16.715   7.389  12.264  1.00 17.10           C
ATOM    685  N   LEU A 105      21.611   9.409  13.217  1.00 18.13           N
ATOM    686  CA  LEU A 105      22.395  10.428  12.525  1.00 18.51           C
ATOM    687  C   LEU A 105      23.710   9.851  11.989  1.00 18.73           C
ATOM    688  O   LEU A 105      24.024  10.026  10.814  1.00 18.31           O
ATOM    689  CB  LEU A 105      22.679  11.626  13.438  1.00 18.21           C
ATOM    690  CG  LEU A 105      23.532  12.745  12.828  1.00 17.88           C
ATOM    691  CD1 LEU A 105      22.832  13.392  11.628  1.00 17.11           C
ATOM    692  CD2 LEU A 105      23.866  13.790  13.882  1.00 18.01           C
ATOM    693  N   ASP A 106      24.468   9.177  12.855  1.00 18.92           N
ATOM    694  CA  ASP A 106      25.702   8.505  12.446  1.00 19.98           C
ATOM    695  C   ASP A 106      25.411   7.402  11.450  1.00 19.53           C
ATOM    696  O   ASP A 106      26.184   7.183  10.513  1.00 19.02           O
ATOM    697  CB  ASP A 106      26.436   7.907  13.648  1.00 20.21           C
ATOM    698  CG  ASP A 106      27.046   8.959  14.529  1.00 22.69           C
ATOM    699  OD1 ASP A 106      27.205  10.117  14.076  1.00 25.34           O
ATOM    700  OD2 ASP A 106      27.389   8.727  15.701  1.00 25.14           O
ATOM    701  N   TYR A 107      24.294   6.712  11.660  1.00 19.26           N
ATOM    702  CA  TYR A 107      23.916   5.633  10.768  1.00 20.05           C
ATOM    703  C   TYR A 107      23.729   6.104   9.324  1.00 20.13           C
ATOM    704  O   TYR A 107      24.266   5.490   8.404  1.00 19.85           O
ATOM    705  CB  TYR A 107      22.660   4.907  11.258  1.00 19.83           C
ATOM    706  CG  TYR A 107      22.399   3.660  10.462  1.00 20.23           C
ATOM    707  CD1 TYR A 107      23.043   2.459  10.775  1.00 19.74           C
ATOM    708  CE1 TYR A 107      22.812   1.319  10.030  1.00 20.62           C
ATOM    709  CZ  TYR A 107      21.948   1.381   8.940  1.00 20.32           C
ATOM    710  OH  TYR A 107      21.701   0.268   8.192  1.00 20.73           O
ATOM    711  CE2 TYR A 107      21.313   2.558   8.604  1.00 20.02           C
ATOM    712  CD2 TYR A 107      21.549   3.689   9.358  1.00 20.45           C
ATOM    713  N   VAL A 108      22.960   7.178   9.139  1.00 20.55           N
ATOM    714  CA  VAL A 108      22.677   7.702   7.803  1.00 20.82           C
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FIG. 5L

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ATOM    715  C   VAL A 108      23.940   8.266   7.147  1.00 21.24           C
ATOM    716  O   VAL A 108      24.123   8.117   5.941  1.00 21.02           O
ATOM    717  CB  VAL A 108      21.497   8.721   7.771  1.00 21.20           C
ATOM    718  CG1 VAL A 108      20.225   8.101   8.345  1.00 20.62           C
ATOM    719  CG2 VAL A 108      21.847  10.033   8.495  1.00 21.22           C
ATOM    720  N   ARG A 109      24.813   8.880   7.950  1.00 21.24           N
ATOM    721  CA  ARG A 109      26.085   9.413   7.458  1.00 21.59           C
ATOM    722  C   ARG A 109      27.042   8.321   6.973  1.00 22.33           C
ATOM    723  O   ARG A 109      27.792   8.519   6.005  1.00 21.98           O
ATOM    724  CB  ARG A 109      26.777  10.224   8.543  1.00 21.05           C
ATOM    725  CG  ARG A 109      26.213  11.597   8.738  1.00 20.31           C
ATOM    726  CD  ARG A 109      26.821  12.343   9.909  1.00 19.56           C
ATOM    727  NE  ARG A 109      26.153  13.624  10.073  1.00 21.62           N
ATOM    728  CZ  ARG A 109      26.400  14.488  11.038  1.00 21.72           C
ATOM    729  NH1 ARG A 109      27.318  14.221  11.956  1.00 22.70           N
ATOM    730  NH2 ARG A 109      25.717  15.622  11.091  1.00 21.34           N
ATOM    731  N   GLU A 110      27.017   7.183   7.664  1.00 23.09           N
ATOM    732  CA  GLU A 110      27.893   6.055   7.361  1.00 24.21           C
ATOM    733  C   GLU A 110      27.354   5.157   6.241  1.00 25.04           C
ATOM    734  O   GLU A 110      28.128   4.645   5.424  1.00 25.10           O
ATOM    735  CB  GLU A 110      28.136   5.221   8.624  1.00 24.23           C
ATOM    736  N   HIS A 111      26.035   4.974   6.201  1.00 25.65           N
ATOM    737  CA  HIS A 111      25.430   4.048   5.248  1.00 26.65           C
ATOM    738  C   HIS A 111      24.667   4.718   4.101  1.00 26.96           C
ATOM    739  O   HIS A 111      23.915   4.057   3.388  1.00 27.26           O
ATOM    740  CB  HIS A 111      24.566   3.015   5.979  1.00 27.06           C
ATOM    741  CG  HIS A 111      25.337   2.163   6.941  1.00 27.67           C
ATOM    742  ND1 HIS A 111      25.385   2.424   8.294  1.00 28.34           N
ATOM    743  CE1 HIS A 111      26.139   1.517   8.891  1.00 27.95           C
ATOM    744  NE2 HIS A 111      26.589   0.682   7.973  1.00 28.73           N
ATOM    745  CD2 HIS A 111      26.105   1.065   6.744  1.00 28.20           C
ATOM    746  N   LYS A 112      24.887   6.020   3.926  1.00 27.81           N
ATOM    747  CA  LYS A 112      24.351   6.804   2.810  1.00 28.57           C
ATOM    748  C   LYS A 112      24.040   5.975   1.567  1.00 28.96           C
ATOM    749  O   LYS A 112      22.883   5.848   1.153  1.00 29.68           O
ATOM    750  CB  LYS A 112      25.373   7.864   2.404  1.00 29.20           C
ATOM    751  CG  LYS A 112      25.185   9.227   3.019  1.00 30.74           C
ATOM    752  CD  LYS A 112      25.990  10.277   2.257  1.00 31.91           C
ATOM    753  CE  LYS A 112      27.460  10.243   2.658  1.00 32.73           C
ATOM    754  N   ASP A 113      25.096   5.414   0.985  1.00 28.50           N
ATOM    755  CA  ASP A 113      25.046   4.751  -0.311  1.00 28.71           C
ATOM    756  C   ASP A 113      24.245   3.444  -0.319  1.00 28.51           C
ATOM    757  O   ASP A 113      24.078   2.817  -1.370  1.00 28.24           O
ATOM    758  CB  ASP A 113      26.480   4.512  -0.821  1.00 28.59           C
ATOM    759  N   ASN A 114      23.746   3.047   0.848  1.00 28.67           N
ATOM    760  CA  ASN A 114      23.028   1.786   1.008  1.00 28.37           C
ATOM    761  C   ASN A 114      21.589   1.949   1.495  1.00 28.14           C
ATOM    762  O   ASN A 114      20.830   0.971   1.550  1.00 28.48           O
ATOM    763  CB  ASN A 114      23.796   0.878   1.969  1.00 29.15           C
ATOM    764  N   ILE A 115      21.212   3.180   1.837  1.00 27.09           N
ATOM    765  CA  ILE A 115      19.898   3.441   2.420  1.00 26.21           C
ATOM    766  C   ILE A 115      18.835   3.702   1.349  1.00 25.87           C
ATOM    767  O   ILE A 115      18.948   4.646   0.554  1.00 26.14           O
ATOM    768  CB  ILE A 115      19.975   4.601   3.449  1.00 26.01           C
ATOM    769  CG1 ILE A 115      20.773   4.158   4.673  1.00 25.48           C
ATOM    770  CD1 ILE A 115      21.239   5.287   5.543  1.00 25.59           C
ATOM    771  CG2 ILE A 115      18.592   5.033   3.878  1.00 25.91           C
ATOM    772  N   GLY A 116      17.813   2.846   1.341  1.00 24.91           N
ATOM    773  CA  GLY A 116      16.731   2.923   0.380  1.00 23.63           C
ATOM    774  C   GLY A 116      15.550   3.733   0.882  1.00 23.43           C
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FIG. 5M

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ATOM    775  O   GLY A 116      15.502   4.152   2.050  1.00 23.30           O
ATOM    776  N   SER A 117      14.582   3.943  -0.004  1.00 22.42           N
ATOM    777  CA  SER A 117      13.457   4.822   0.293  1.00 21.39           C
ATOM    778  C   SER A 117      12.503   4.205   1.308  1.00 20.66           C
ATOM    779  O   SER A 117      11.892   4.926   2.090  1.00 20.21           O
ATOM    780  CB  SER A 117      12.727   5.234  -0.989  1.00 21.38           C
ATOM    781  OG  SER A 117      12.203   4.108  -1.669  1.00 21.36           O
ATOM    782  N   GLN A 118      12.392   2.877   1.306  1.00 20.00           N
ATOM    783  CA  GLN A 118      11.538   2.190   2.273  1.00 20.08           C
ATOM    784  C   GLN A 118      11.970   2.440   3.720  1.00 19.51           C
ATOM    785  O   GLN A 118      11.143   2.819   4.567  1.00 19.34           O
ATOM    786  CB  GLN A 118      11.456   0.686   1.998  1.00 19.66           C
ATOM    787  CG  GLN A 118      10.421  -0.030   2.876  1.00 21.00           C
ATOM    788  CD  GLN A 118       8.985   0.324   2.513  1.00 22.64           C
ATOM    789  OE1 GLN A 118       8.403  -0.281   1.615  1.00 23.31           O
ATOM    790  NE2 GLN A 118       8.417   1.310   3.205  1.00 23.01           N
ATOM    791  N   TYR A 119      13.263   2.239   3.983  1.00 19.00           N
ATOM    792  CA  TYR A 119      13.826   2.413   5.319  1.00 18.72           C
ATOM    793  C   TYR A 119      13.670   3.862   5.785  1.00 18.41           C
ATOM    794  O   TYR A 119      13.241   4.109   6.917  1.00 18.22           O
ATOM    795  CB  TYR A 119      15.293   1.969   5.363  1.00 18.00           C
ATOM    796  CG  TYR A 119      15.543   0.459   5.435  1.00 18.47           C
ATOM    797  CD1 TYR A 119      16.845  -0.045   5.342  1.00 18.34           C
ATOM    798  CE1 TYR A 119      17.110  -1.412   5.406  1.00 18.42           C
ATOM    799  CZ  TYR A 119      16.071  -2.307   5.565  1.00 19.18           C
ATOM    800  OH  TYR A 119      16.365  -3.661   5.636  1.00 18.14           O
ATOM    801  CE2 TYR A 119      14.751  -1.841   5.664  1.00 18.93           C
ATOM    802  CD2 TYR A 119      14.497  -0.460   5.600  1.00 18.45           C
ATOM    803  N   LEU A 120      13.975   4.806   4.891  1.00 18.95           N
ATOM    804  CA  LEU A 120      13.894   6.244   5.187  1.00 19.17           C
ATOM    805  C   LEU A 120      12.508   6.643   5.673  1.00 18.74           C
ATOM    806  O   LEU A 120      12.363   7.299   6.707  1.00 18.45           O
ATOM    807  CB  LEU A 120      14.264   7.076   3.960  1.00 19.44           C
ATOM    808  CG  LEU A 120      15.758   7.312   3.693  1.00 21.10           C
ATOM    809  CD1 LEU A 120      15.971   7.837   2.273  1.00 20.10           C
ATOM    810  CD2 LEU A 120      16.409   8.248   4.728  1.00 20.90           C
ATOM    811  N   LEU A 121      11.497   6.212   4.924  1.00 18.66           N
ATOM    812  CA  LEU A 121      10.109   6.510   5.227  1.00 18.36           C
ATOM    813  C   LEU A 121       9.618   5.743   6.439  1.00 18.61           C
ATOM    814  O   LEU A 121       8.786   6.249   7.198  1.00 19.68           O
ATOM    815  CB  LEU A 121       9.232   6.207   4.012  1.00 18.98           C
ATOM    816  CG  LEU A 121       9.392   7.129   2.793  1.00 19.19           C
ATOM    817  CD1 LEU A 121       8.703   6.515   1.584  1.00 18.33           C
ATOM    818  CD2 LEU A 121       8.850   8.551   3.060  1.00 18.58           C
ATOM    819  N   ASN A 122      10.120   4.520   6.622  1.00 18.38           N
ATOM    820  CA  ASN A 122       9.759   3.706   7.786  1.00 17.11           C
ATOM    821  C   ASN A 122      10.309   4.315   9.065  1.00 16.63           C
ATOM    822  O   ASN A 122       9.713   4.157  10.132  1.00 16.54           O
ATOM    823  CB  ASN A 122      10.263   2.262   7.653  1.00 17.07           C
ATOM    824  CG  ASN A 122       9.367   1.386   6.768  1.00 17.24           C
ATOM    825  OD1 ASN A 122       8.336   1.819   6.253  1.00 17.42           O
ATOM    826  ND2 ASN A 122       9.780   0.142   6.587  1.00 17.01           N
ATOM    827  N   TRP A 123      11.450   4.995   8.963  1.00 15.72           N
ATOM    828  CA  TRP A 123      12.001   5.711  10.113  1.00 15.48           C
ATOM    829  C   TRP A 123      11.105   6.893  10.473  1.00 15.29           C
ATOM    830  O   TRP A 123      10.834   7.121  11.644  1.00 15.63           O
ATOM    831  CB  TRP A 123      13.454   6.171   9.870  1.00 15.22           C
ATOM    832  CG  TRP A 123      14.436   5.053   9.685  1.00 14.30           C
ATOM    833  CD1 TRP A 123      14.354   3.788  10.207  1.00 14.15           C
ATOM    834  NE1 TRP A 123      15.441   3.041   9.810  1.00 15.26           N
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FIG. 5N

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ATOM    835  CE2 TRP A 123      16.257   3.817   9.025  1.00 14.52           C
ATOM    836  CD2 TRP A 123      15.654   5.092   8.924  1.00 13.71           C
ATOM    837  CE3 TRP A 123      16.304   6.080   8.167  1.00 13.55           C
ATOM    838  CZ3 TRP A 123      17.513   5.765   7.533  1.00 12.79           C
ATOM    839  CH2 TRP A 123      18.084   4.489   7.656  1.00 13.28           C
ATOM    840  CZ2 TRP A 123      17.476   3.503   8.393  1.00 14.31           C
ATOM    841  N   CYS A 124      10.634   7.625   9.460  1.00 15.14           N
ATOM    842  CA  CYS A 124       9.698   8.736   9.660  1.00 15.21           C
ATOM    843  C   CYS A 124       8.424   8.311  10.374  1.00 14.82           C
ATOM    844  O   CYS A 124       7.975   8.985  11.306  1.00 14.56           O
ATOM    845  CB  CYS A 124       9.313   9.371   8.324  1.00 15.93           C
ATOM    846  SG  CYS A 124      10.641  10.270   7.513  1.00 16.36           S
ATOM    847  N   VAL A 125       7.838   7.203   9.919  1.00 14.31           N
ATOM    848  CA  VAL A 125       6.629   6.654  10.524  1.00 13.89           C
ATOM    849  C   VAL A 125       6.894   6.286  11.980  1.00 14.21           C
ATOM    850  O   VAL A 125       6.124   6.649  12.874  1.00 14.19           O
ATOM    851  CB  VAL A 125       6.120   5.403   9.729  1.00 14.52           C
ATOM    852  CG1 VAL A 125       5.024   4.644  10.486  1.00 12.49           C
ATOM    853  CG2 VAL A 125       5.643   5.801   8.344  1.00 13.42           C
ATOM    854  N   GLN A 126       8.003   5.586  12.211  1.00 14.40           N
ATOM    855  CA  GLN A 126       8.347   5.096  13.550  1.00 14.70           C
ATOM    856  C   GLN A 126       8.545   6.203  14.576  1.00 14.00           C
ATOM    857  O   GLN A 126       8.036   6.108  15.698  1.00 13.54           O
ATOM    858  CB  GLN A 126       9.578   4.195  13.490  1.00 15.10           C
ATOM    859  CG  GLN A 126       9.282   2.826  12.880  1.00 17.17           C
ATOM    860  CD  GLN A 126      10.525   1.999  12.700  1.00 20.96           C
ATOM    861  OE1 GLN A 126      11.302   1.830  13.639  1.00 22.68           O
ATOM    862  NE2 GLN A 126      10.728   1.486  11.492  1.00 22.88           N
ATOM    863  N   ILE A 127       9.278   7.246  14.184  1.00 13.37           N
ATOM    864  CA  ILE A 127       9.502   8.412  15.042  1.00 13.63           C
ATOM    865  C   ILE A 127       8.181   9.135  15.346  1.00 13.10           C
ATOM    866  O   ILE A 127       7.969   9.594  16.462  1.00 13.28           O
ATOM    867  CB  ILE A 127      10.581   9.376  14.424  1.00 13.61           C
ATOM    868  CG1 ILE A 127      11.936   8.671  14.311  1.00 12.05           C
ATOM    869  CD1 ILE A 127      12.841   9.240  13.224  1.00 11.70           C
ATOM    870  CG2 ILE A 127      10.769  10.620  15.283  1.00 13.78           C
ATOM    871  N   ALA A 128       7.289   9.199  14.361  1.00 13.28           N
ATOM    872  CA  ALA A 128       5.961   9.778  14.555  1.00 13.03           C
ATOM    873  C   ALA A 128       5.155   8.960  15.552  1.00 13.27           C
ATOM    874  O   ALA A 128       4.450   9.517  16.391  1.00 13.14           O
ATOM    875  CB  ALA A 128       5.214   9.894  13.228  1.00 12.73           C
ATOM    876  N   LYS A 129       5.267   7.637  15.454  1.00 13.85           N
ATOM    877  CA  LYS A 129       4.575   6.725  16.362  1.00 14.17           C
ATOM    878  C   LYS A 129       4.990   6.930  17.819  1.00 14.33           C
ATOM    879  O   LYS A 129       4.147   6.851  18.721  1.00 13.89           O
ATOM    880  CB  LYS A 129       4.805   5.273  15.947  1.00 13.58           C
ATOM    881  CG  LYS A 129       3.909   4.845  14.796  1.00 15.97           C
ATOM    882  CD  LYS A 129       4.103   3.379  14.398  1.00 16.91           C
ATOM    883  CE  LYS A 129       3.195   3.037  13.222  1.00 19.68           C
ATOM    884  NZ  LYS A 129       3.293   1.603  12.810  1.00 22.45           N
ATOM    885  N   GLY A 130       6.286   7.185  18.032  1.00 13.96           N
ATOM    886  CA  GLY A 130       6.839   7.334  19.360  1.00 14.09           C
ATOM    887  C   GLY A 130       6.523   8.694  19.952  1.00 14.58           C
ATOM    888  O   GLY A 130       6.305   8.838  21.154  1.00 14.52           O
ATOM    889  N   MET A 131       6.513   9.701  19.092  1.00 14.84           N
ATOM    890  CA  MET A 131       6.190  11.053  19.502  1.00 14.50           C
ATOM    891  C   MET A 131       4.703  11.145  19.830  1.00 14.37           C
ATOM    892  O   MET A 131       4.324  11.734  20.845  1.00 14.31           O
ATOM    893  CB  MET A 131       6.586  12.041  18.401  1.00 15.08           C
ATOM    894  CG  MET A 131       8.087  12.293  18.237  1.00 14.49           C
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FIG. 5O

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ATOM    895  SD  MET A 131       9.027  12.425  19.792  1.00 17.42           S
ATOM    896  CE  MET A 131       8.633  14.034  20.326  1.00 17.35           C
ATOM    897  N   ASN A 132       3.870  10.531  18.989  1.00 14.50           N
ATOM    898  CA  ASN A 132       2.442  10.400  19.264  1.00 14.90           C
ATOM    899  C   ASN A 132       2.143   9.729  20.608  1.00 15.41           C
ATOM    900  O   ASN A 132       1.257  10.190  21.348  1.00 15.26           O
ATOM    901  CB  ASN A 132       1.726   9.659  18.138  1.00 15.21           C
ATOM    902  CG  ASN A 132       0.207   9.659  18.303  1.00 16.33           C
ATOM    903  OD1 ASN A 132      -0.443  10.671  18.090  1.00 17.58           O
ATOM    904  ND2 ASN A 132      -0.355   8.514  18.679  1.00 16.50           N
ATOM    905  N   TYR A 133       2.873   8.653  20.922  1.00 14.99           N
ATOM    906  CA  TYR A 133       2.712   7.982  22.214  1.00 15.40           C
ATOM    907  C   TYR A 133       3.041   8.947  23.351  1.00 15.44           C
ATOM    908  O   TYR A 133       2.349   8.973  24.371  1.00 15.16           O
ATOM    909  CB  TYR A 133       3.590   6.728  22.319  1.00 15.46           C
ATOM    910  CG  TYR A 133       3.726   6.200  23.732  1.00 15.71           C
ATOM    911  CD1 TYR A 133       2.803   5.288  24.248  1.00 14.82           C
ATOM    912  CE1 TYR A 133       2.917   4.804  25.545  1.00 14.41           C
ATOM    913  CZ  TYR A 133       3.959   5.233  26.350  1.00 15.35           C
ATOM    914  OH  TYR A 133       4.063   4.755  27.643  1.00 15.78           O
ATOM    915  CE2 TYR A 133       4.892   6.144  25.868  1.00 15.46           C
ATOM    916  CD2 TYR A 133       4.774   6.622  24.563  1.00 16.54           C
ATOM    917  N   LEU A 134       4.106   9.729  23.163  1.00 15.72           N
ATOM    918  CA  LEU A 134       4.535  10.708  24.154  1.00 15.87           C
ATOM    919  C   LEU A 134       3.459  11.773  24.326  1.00 16.01           C
ATOM    920  O   LEU A 134       3.154  12.170  25.450  1.00 16.23           O
ATOM    921  CB  LEU A 134       5.867  11.333  23.742  1.00 15.78           C
ATOM    922  CG  LEU A 134       7.162  10.908  24.441  1.00 16.15           C
ATOM    923  CD1 LEU A 134       7.075   9.522  25.075  1.00 15.74           C
ATOM    924  CD2 LEU A 134       8.360  11.003  23.496  1.00 13.85           C
ATOM    925  N   GLU A 135       2.879  12.204  23.204  1.00 16.46           N
ATOM    926  CA  GLU A 135       1.778  13.164  23.193  1.00 17.29           C
ATOM    927  C   GLU A 135       0.523  12.628  23.905  1.00 17.62           C
ATOM    928  O   GLU A 135      -0.066  13.334  24.726  1.00 17.96           O
ATOM    929  CB  GLU A 135       1.460  13.605  21.755  1.00 17.14           C
ATOM    930  CG  GLU A 135       0.089  14.238  21.575  1.00 18.32           C
ATOM    931  CD  GLU A 135       0.024  15.261  20.457  1.00 20.06           C
ATOM    932  OE1 GLU A 135      -0.705  16.270  20.628  1.00 19.86           O
ATOM    933  OE2 GLU A 135       0.682  15.061  19.406  1.00 21.64           O
ATOM    934  N   ASP A 136       0.127  11.390  23.600  1.00 17.99           N
ATOM    935  CA  ASP A 136      -1.043  10.772  24.220  1.00 18.35           C
ATOM    936  C   ASP A 136      -0.874  10.707  25.733  1.00 19.10           C
ATOM    937  O   ASP A 136      -1.845  10.796  26.483  1.00 18.65           O
ATOM    938  CB  ASP A 136      -1.257   9.358  23.698  1.00 18.04           C
ATOM    939  CG  ASP A 136      -1.944   9.314  22.336  1.00 18.87           C
ATOM    940  OD1 ASP A 136      -2.681  10.265  21.956  1.00 16.22           O
ATOM    941  OD2 ASP A 136      -1.801   8.322  21.582  1.00 18.98           O
ATOM    942  N   ARG A 137       0.372  10.544  26.167  1.00 19.72           N
ATOM    943  CA  ARG A 137       0.703  10.498  27.582  1.00 20.48           C
ATOM    944  C   ARG A 137       0.945  11.900  28.142  1.00 20.61           C
ATOM    945  O   ARG A 137       1.317  12.045  29.301  1.00 20.07           O
ATOM    946  CB  ARG A 137       1.934   9.619  27.797  1.00 21.19           C
ATOM    947  CG  ARG A 137       1.603   8.144  27.976  1.00 22.61           C
ATOM    948  CD  ARG A 137       1.636   7.689  29.416  1.00 24.32           C
ATOM    949  NE  ARG A 137       2.892   6.993  29.659  1.00 26.86           N
ATOM    950  CZ  ARG A 137       3.675   7.191  30.698  1.00 26.31           C
ATOM    951  NH1 ARG A 137       3.350   8.063  31.638  1.00 25.50           N
ATOM    952  NH2 ARG A 137       4.802   6.509  30.790  1.00 28.28           N
ATOM    953  N   ARG A 138       0.723  12.918  27.305  1.00 20.71           N
ATOM    954  CA  ARG A 138       0.954  14.324  27.660  1.00 21.45           C
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FIG. 5P

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ATOM    955  C   ARG A 138       2.372  14.556  28.187  1.00 21.36           C
ATOM    956  O   ARG A 138       2.590  15.297  29.145  1.00 22.23           O
ATOM    957  CB  ARG A 138      -0.111  14.852  28.638  1.00 21.55           C
ATOM    958  N   LEU A 139       3.326  13.905  27.536  1.00 21.31           N
ATOM    959  CA  LEU A 139       4.737  14.082  27.818  1.00 20.72           C
ATOM    960  C   LEU A 139       5.388  14.796  26.642  1.00 19.91           C
ATOM    961  O   LEU A 139       5.127  14.451  25.486  1.00 20.46           O
ATOM    962  CB  LEU A 139       5.391  12.723  28.042  1.00 21.21           C
ATOM    963  CG  LEU A 139       4.891  11.908  29.236  1.00 22.10           C
ATOM    964  CD1 LEU A 139       5.500  10.508  29.198  1.00 21.82           C
ATOM    965  CD2 LEU A 139       5.193  12.621  30.562  1.00 22.12           C
ATOM    966  N   VAL A 140       6.203  15.803  26.940  1.00 18.80           N
ATOM    967  CA  VAL A 140       6.874  16.616  25.925  1.00 17.97           C
ATOM    968  C   VAL A 140       8.355  16.261  25.929  1.00 18.17           C
ATOM    969  O   VAL A 140       8.998  16.315  26.979  1.00 18.14           O
ATOM    970  CB  VAL A 140       6.674  18.157  26.183  1.00 18.07           C
ATOM    971  CG1 VAL A 140       7.520  19.010  25.212  1.00 17.71           C
ATOM    972  CG2 VAL A 140       5.203  18.546  26.068  1.00 15.63           C
ATOM    973  N   HIS A 141       8.896  15.889  24.767  1.00 17.99           N
ATOM    974  CA  HIS A 141      10.299  15.458  24.685  1.00 17.67           C
ATOM    975  C   HIS A 141      11.287  16.612  24.830  1.00 18.35           C
ATOM    976  O   HIS A 141      12.211  16.529  25.645  1.00 17.90           O
ATOM    977  CB  HIS A 141      10.582  14.676  23.390  1.00 16.89           C
ATOM    978  CG  HIS A 141      11.887  13.942  23.405  1.00 15.60           C
ATOM    979  ND1 HIS A 141      13.103  14.578  23.267  1.00 14.91           N
ATOM    980  CE1 HIS A 141      14.075  13.684  23.331  1.00 14.34           C
ATOM    981  NE2 HIS A 141      13.535  12.492  23.501  1.00 13.15           N
ATOM    982  CD2 HIS A 141      12.169  12.625  23.559  1.00 14.70           C
ATOM    983  N   ARG A 142      11.100  17.653  24.010  1.00 19.05           N
ATOM    984  CA  ARG A 142      11.910  18.896  24.004  1.00 20.24           C
ATOM    985  C   ARG A 142      13.244  18.846  23.253  1.00 19.86           C
ATOM    986  O   ARG A 142      13.824  19.900  22.958  1.00 20.25           O
ATOM    987  CB  ARG A 142      12.174  19.438  25.416  1.00 20.56           C
ATOM    988  CG  ARG A 142      10.944  19.745  26.217  1.00 24.00           C
ATOM    989  CD  ARG A 142      11.195  19.734  27.703  1.00 28.85           C
ATOM    990  NE  ARG A 142      11.586  21.058  28.172  1.00 32.64           N
ATOM    991  CZ  ARG A 142      10.759  21.916  28.759  1.00 34.42           C
ATOM    992  NH1 ARG A 142       9.483  21.594  28.962  1.00 35.67           N
ATOM    993  NH2 ARG A 142      11.213  23.094  29.150  1.00 35.05           N
ATOM    994  N   ASP A 143      13.745  17.649  22.965  1.00 19.33           N
ATOM    995  CA  ASP A 143      15.061  17.515  22.325  1.00 19.01           C
ATOM    996  C   ASP A 143      15.095  16.435  21.228  1.00 17.92           C
ATOM    997  O   ASP A 143      16.052  15.667  21.119  1.00 17.22           O
ATOM    998  CB  ASP A 143      16.154  17.288  23.387  1.00 19.42           C
ATOM    999  CG  ASP A 143      17.570  17.549  22.861  1.00 21.49           C
ATOM   1000  OD1 ASP A 143      17.743  18.171  21.784  1.00 21.44           O
ATOM   1001  OD2 ASP A 143      18.588  17.150  23.475  1.00 23.75           O
ATOM   1002  N   LEU A 144      14.045  16.401  20.408  1.00 16.80           N
ATOM   1003  CA  LEU A 144      14.001  15.512  19.247  1.00 15.90           C
ATOM   1004  C   LEU A 144      14.982  15.974  18.179  1.00 15.48           C
ATOM   1005  O   LEU A 144      14.974  17.150  17.794  1.00 15.10           O
ATOM   1006  CB  LEU A 144      12.581  15.438  18.659  1.00 15.84           C
ATOM   1007  CG  LEU A 144      12.357  14.438  17.512  1.00 15.36           C
ATOM   1008  CD1 LEU A 144      12.730  13.011  17.911  1.00 13.15           C
ATOM   1009  CD2 LEU A 144      10.919  14.499  17.038  1.00 15.96           C
ATOM   1010  N   ALA A 145      15.820  15.038  17.719  1.00 14.73           N
ATOM   1011  CA  ALA A 145      16.845  15.275  16.693  1.00 13.65           C
ATOM   1012  C   ALA A 145      17.372  13.912  16.272  1.00 13.72           C
ATOM   1013  O   ALA A 145      17.207  12.940  17.025  1.00 13.86           O
ATOM   1014  CB  ALA A 145      17.983  16.119  17.250  1.00 13.19           C
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FIG. 5Q

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ATOM   1015  N   ALA A 146      18.020  13.826  15.105  1.00 12.64           N
ATOM   1016  CA  ALA A 146      18.538  12.538  14.628  1.00 12.88           C
ATOM   1017  C   ALA A 146      19.587  11.911  15.566  1.00 13.31           C
ATOM   1018  O   ALA A 146      19.693  10.679  15.653  1.00 13.58           O
ATOM   1019  CB  ALA A 146      19.073  12.649  13.221  1.00 12.31           C
ATOM   1020  N   ARG A 147      20.335  12.756  16.280  1.00 13.66           N
ATOM   1021  CA  ARG A 147      21.287  12.297  17.297  1.00 14.09           C
ATOM   1022  C   ARG A 147      20.560  11.659  18.480  1.00 14.44           C
ATOM   1023  O   ARG A 147      21.163  10.927  19.255  1.00 14.85           O
ATOM   1024  CB  ARG A 147      22.187  13.451  17.782  1.00 14.71           C
ATOM   1025  CG  ARG A 147      21.422  14.659  18.329  1.00 14.43           C
ATOM   1026  CD  ARG A 147      22.251  15.715  19.062  1.00 15.49           C
ATOM   1027  NE  ARG A 147      21.360  16.732  19.626  1.00 16.41           N
ATOM   1028  CZ  ARG A 147      20.892  17.788  18.951  1.00 18.11           C
ATOM   1029  NH1 ARG A 147      21.269  18.004  17.693  1.00 18.16           N
ATOM   1030  NH2 ARG A 147      20.061  18.643  19.537  1.00 16.89           N
ATOM   1031  N   ASN A 148      19.262  11.938  18.607  1.00 14.46           N
ATOM   1032  CA  ASN A 148      18.454  11.421  19.707  1.00 14.71           C
ATOM   1033  C   ASN A 148      17.480  10.299  19.289  1.00 14.74           C
ATOM   1034  O   ASN A 148      16.562   9.931  20.034  1.00 13.85           O
ATOM   1035  CB  ASN A 148      17.732  12.576  20.416  1.00 14.71           C
ATOM   1036  CG  ASN A 148      18.652  13.346  21.353  1.00 16.18           C
ATOM   1037  OD1 ASN A 148      19.732  12.875  21.704  1.00 19.21           O
ATOM   1038  ND2 ASN A 148      18.230  14.533  21.761  1.00 16.91           N
ATOM   1039  N   VAL A 149      17.694   9.762  18.090  1.00 14.34           N
ATOM   1040  CA  VAL A 149      17.011   8.553  17.658  1.00 14.49           C
ATOM   1041  C   VAL A 149      18.071   7.456  17.578  1.00 14.54           C
ATOM   1042  O   VAL A 149      19.134   7.658  17.002  1.00 14.91           O
ATOM   1043  CB  VAL A 149      16.287   8.735  16.294  1.00 14.23           C
ATOM   1044  CG1 VAL A 149      15.564   7.459  15.882  1.00 13.72           C
ATOM   1045  CG2 VAL A 149      15.314   9.907  16.341  1.00 13.59           C
ATOM   1046  N   LEU A 150      17.789   6.310  18.185  1.00 14.84           N
ATOM   1047  CA  LEU A 150      18.741   5.203  18.198  1.00 15.61           C
ATOM   1048  C   LEU A 150      18.242   4.053  17.337  1.00 15.54           C
ATOM   1049  O   LEU A 150      17.045   3.919  17.105  1.00 16.01           O
ATOM   1050  CB  LEU A 150      19.025   4.721  19.628  1.00 14.77           C
ATOM   1051  CG  LEU A 150      19.612   5.692  20.657  1.00 16.11           C
ATOM   1052  CD1 LEU A 150      19.742   5.017  22.040  1.00 14.87           C
ATOM   1053  CD2 LEU A 150      20.949   6.306  20.210  1.00 15.56           C
ATOM   1054  N   VAL A 151      19.177   3.225  16.887  1.00 16.30           N
ATOM   1055  CA  VAL A 151      18.899   2.137  15.960  1.00 16.74           C
ATOM   1056  C   VAL A 151      19.056   0.795  16.673  1.00 17.53           C
ATOM   1057  O   VAL A 151      20.166   0.388  17.030  1.00 17.31           O
ATOM   1058  CB  VAL A 151      19.849   2.194  14.724  1.00 16.51           C
ATOM   1059  CG1 VAL A 151      19.427   1.205  13.656  1.00 15.96           C
ATOM   1060  CG2 VAL A 151      19.929   3.595  14.149  1.00 15.50           C
ATOM   1061  N   LYS A 152      17.931   0.121  16.885  1.00 18.49           N
ATOM   1062  CA  LYS A 152      17.926  -1.217  17.470  1.00 19.20           C
ATOM   1063  C   LYS A 152      18.276  -2.229  16.377  1.00 19.12           C
ATOM   1064  O   LYS A 152      19.193  -3.038  16.541  1.00 19.20           O
ATOM   1065  CB  LYS A 152      16.561  -1.503  18.110  1.00 19.41           C
ATOM   1066  CG  LYS A 152      16.160  -2.964  18.186  1.00 21.14           C
ATOM   1067  CD  LYS A 152      16.606  -3.604  19.479  1.00 23.55           C
ATOM   1068  CE  LYS A 152      15.576  -4.587  19.975  1.00 24.60           C
ATOM   1069  NZ  LYS A 152      14.195  -4.098  19.681  1.00 26.65           N
ATOM   1070  N   THR A 153      17.518  -2.179  15.281  1.00 18.93           N
ATOM   1071  CA  THR A 153      17.873  -2.814  14.003  1.00 19.32           C
ATOM   1072  C   THR A 153      17.679  -1.748  12.922  1.00 19.14           C
ATOM   1073  O   THR A 153      16.933  -0.791  13.146  1.00 18.51           O
ATOM   1074  CB  THR A 153      16.963  -4.012  13.681  1.00 18.49           C
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FIG. 5R

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ATOM   1075  OG1 THR A 153      15.668  -3.529  13.306  1.00 18.93           O
ATOM   1076  CG2 THR A 153      16.680  -4.866  14.912  1.00 19.22           C
ATOM   1077  N   PRO A 154      18.307  -1.905  11.754  1.00 19.47           N
ATOM   1078  CA  PRO A 154      18.166  -0.912  10.674  1.00 19.95           C
ATOM   1079  C   PRO A 154      16.715  -0.642  10.284  1.00 20.01           C
ATOM   1080  O   PRO A 154      16.429   0.399   9.702  1.00 20.48           O
ATOM   1081  CB  PRO A 154      18.940  -1.544   9.520  1.00 19.75           C
ATOM   1082  CG  PRO A 154      19.956  -2.383  10.204  1.00 19.57           C
ATOM   1083  CD  PRO A 154      19.200  -3.007  11.351  1.00 19.61           C
ATOM   1084  N   GLN A 155      15.811  -1.550  10.633  1.00 20.52           N
ATOM   1085  CA  GLN A 155      14.391  -1.348  10.359  1.00 20.99           C
ATOM   1086  C   GLN A 155      13.574  -0.922  11.592  1.00 20.58           C
ATOM   1087  O   GLN A 155      12.384  -0.651  11.468  1.00 21.14           O
ATOM   1088  CB  GLN A 155      13.774  -2.568   9.645  1.00 21.50           C
ATOM   1089  CG  GLN A 155      14.100  -3.939  10.239  1.00 22.63           C
ATOM   1090  CD  GLN A 155      15.398  -4.554   9.706  1.00 22.97           C
ATOM   1091  OE1 GLN A 155      16.340  -4.754  10.465  1.00 23.72           O
ATOM   1092  NE2 GLN A 155      15.434  -4.872   8.421  1.00 22.60           N
ATOM   1093  N   HIS A 156      14.224  -0.834  12.758  1.00 20.02           N
ATOM   1094  CA  HIS A 156      13.561  -0.470  14.013  1.00 19.04           C
ATOM   1095  C   HIS A 156      14.307   0.609  14.816  1.00 18.95           C
ATOM   1096  O   HIS A 156      15.363   0.352  15.410  1.00 18.48           O
ATOM   1097  CB  HIS A 156      13.350  -1.712  14.871  1.00 19.37           C
ATOM   1098  CG  HIS A 156      12.531  -1.476  16.101  1.00 19.41           C
ATOM   1099  ND1 HIS A 156      12.141  -2.501  16.934  1.00 19.90           N
ATOM   1100  CE1 HIS A 156      11.434  -2.011  17.935  1.00 19.60           C
ATOM   1101  NE2 HIS A 156      11.357  -0.701  17.787  1.00 20.22           N
ATOM   1102  CD2 HIS A 156      12.030  -0.341  16.643  1.00 20.26           C
ATOM   1103  N   VAL A 157      13.734   1.814  14.839  1.00 18.44           N
ATOM   1104  CA  VAL A 157      14.306   2.934  15.586  1.00 17.60           C
ATOM   1105  C   VAL A 157      13.487   3.330  16.818  1.00 17.83           C
ATOM   1106  O   VAL A 157      12.290   3.018  16.922  1.00 16.77           O
ATOM   1107  CB  VAL A 157      14.559   4.177  14.690  1.00 17.96           C
ATOM   1108  CG1 VAL A 157      15.529   3.850  13.556  1.00 16.46           C
ATOM   1109  CG2 VAL A 157      13.233   4.787  14.161  1.00 16.94           C
ATOM   1110  N   LYS A 158      14.165   4.022  17.736  1.00 17.71           N
ATOM   1111  CA  LYS A 158      13.635   4.412  19.039  1.00 17.71           C
ATOM   1112  C   LYS A 158      14.125   5.810  19.406  1.00 17.50           C
ATOM   1113  O   LYS A 158      15.315   6.137  19.254  1.00 16.92           O
ATOM   1114  CB  LYS A 158      14.111   3.436  20.121  1.00 18.27           C
ATOM   1115  CG  LYS A 158      13.147   2.320  20.455  1.00 19.57           C
ATOM   1116  CD  LYS A 158      13.790   0.970  20.204  1.00 21.17           C
ATOM   1117  CE  LYS A 158      13.154  -0.136  21.038  1.00 21.90           C
ATOM   1118  NZ  LYS A 158      13.278   0.051  22.513  1.00 21.84           N
ATOM   1119  N   ILE A 159      13.200   6.633  19.880  1.00 17.27           N
ATOM   1120  CA  ILE A 159      13.528   7.946  20.408  1.00 17.48           C
ATOM   1121  C   ILE A 159      14.154   7.758  21.792  1.00 17.64           C
ATOM   1122  O   ILE A 159      13.612   7.050  22.651  1.00 17.31           O
ATOM   1123  CB  ILE A 159      12.250   8.845  20.468  1.00 18.03           C
ATOM   1124  CG1 ILE A 159      11.590   8.923  19.089  1.00 17.36           C
ATOM   1125  CD1 ILE A 159      10.074   9.055  19.146  1.00 18.32           C
ATOM   1126  CG2 ILE A 159      12.576  10.256  20.952  1.00 16.87           C
ATOM   1127  N   THR A 160      15.309   8.379  21.994  1.00 18.18           N
ATOM   1128  CA  THR A 160      16.008   8.283  23.263  1.00 19.24           C
ATOM   1129  C   THR A 160      16.080   9.622  23.978  1.00 20.13           C
ATOM   1130  O   THR A 160      15.748  10.665  23.405  1.00 19.57           O
ATOM   1131  CB  THR A 160      17.419   7.697  23.067  1.00 19.37           C
ATOM   1132  OG1 THR A 160      17.915   7.229  24.327  1.00 20.74           O
ATOM   1133  CG2 THR A 160      18.425   8.781  22.681  1.00 18.67           C
ATOM   1134  N   ASP A 161      16.518   9.561  25.235  1.00 21.59           N
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FIG. 5S

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ATOM   1135  CA  ASP A 161      16.777  10.730  26.075  1.00 23.05           C
ATOM   1136  C   ASP A 161      15.535  11.523  26.457  1.00 23.74           C
ATOM   1137  O   ASP A 161      15.641  12.702  26.774  1.00 23.97           O
ATOM   1138  CB  ASP A 161      17.813  11.658  25.436  1.00 23.33           C
ATOM   1139  CG  ASP A 161      19.199  11.053  25.410  1.00 24.80           C
ATOM   1140  OD1 ASP A 161      19.364   9.908  25.893  1.00 25.43           O
ATOM   1141  OD2 ASP A 161      20.185  11.654  24.923  1.00 26.18           O
ATOM   1142  N   PHE A 162      14.364  10.895  26.435  1.00 24.61           N
ATOM   1143  CA  PHE A 162      13.202  11.552  27.008  1.00 26.22           C
ATOM   1144  C   PHE A 162      13.470  11.808  28.495  1.00 27.55           C
ATOM   1145  O   PHE A 162      13.898  10.899  29.220  1.00 27.82           O
ATOM   1146  CB  PHE A 162      11.924  10.733  26.858  1.00 25.70           C
ATOM   1147  CG  PHE A 162      10.799  11.272  27.677  1.00 26.29           C
ATOM   1148  CD1 PHE A 162      10.144  12.440  27.288  1.00 26.33           C
ATOM   1149  CE1 PHE A 162       9.126  12.973  28.053  1.00 26.57           C
ATOM   1150  CZ  PHE A 162       8.756  12.339  29.240  1.00 27.93           C
ATOM   1151  CE2 PHE A 162       9.414  11.179  29.644  1.00 27.04           C
ATOM   1152  CD2 PHE A 162      10.431  10.655  28.865  1.00 26.37           C
ATOM   1153  N   GLY A 163      13.232  13.044  28.933  1.00 28.52           N
ATOM   1154  CA  GLY A 163      13.381  13.404  30.332  1.00 29.88           C
ATOM   1155  C   GLY A 163      14.786  13.822  30.747  1.00 31.02           C
ATOM   1156  O   GLY A 163      14.985  14.270  31.879  1.00 31.42           O
ATOM   1157  N   LEU A 164      15.754  13.699  29.841  1.00 31.58           N
ATOM   1158  CA  LEU A 164      17.139  14.054  30.144  1.00 32.81           C
ATOM   1159  C   LEU A 164      17.390  15.572  30.253  1.00 33.77           C
ATOM   1160  O   LEU A 164      18.513  16.042  30.050  1.00 34.62           O
ATOM   1161  CB  LEU A 164      18.094  13.420  29.121  1.00 32.62           C
ATOM   1162  CG  LEU A 164      19.010  12.275  29.568  1.00 33.16           C
ATOM   1163  CD1 LEU A 164      20.130  12.049  28.556  1.00 32.69           C
ATOM   1164  CD2 LEU A 164      19.594  12.488  30.964  1.00 32.89           C
ATOM   1165  N   ALA A 165      16.341  16.337  30.549  1.00 34.73           N
ATOM   1166  CA  ALA A 165      16.480  17.750  30.899  1.00 34.93           C
ATOM   1167  C   ALA A 165      16.058  17.965  32.347  1.00 34.94           C
ATOM   1168  O   ALA A 165      14.934  17.632  32.730  1.00 35.00           O
ATOM   1169  CB  ALA A 165      15.649  18.626  29.964  1.00 34.93           C
ATOM   1170  N   VAL A 182      20.301  25.244  23.844  1.00 34.28           N
ATOM   1171  CA  VAL A 182      21.537  24.924  23.126  1.00 34.05           C
ATOM   1172  C   VAL A 182      21.286  24.339  21.719  1.00 33.33           C
ATOM   1173  O   VAL A 182      22.023  24.664  20.779  1.00 33.82           O
ATOM   1174  CB  VAL A 182      22.482  24.006  23.964  1.00 34.30           C
ATOM   1175  CG1 VAL A 182      23.807  23.759  23.235  1.00 34.94           C
ATOM   1176  CG2 VAL A 182      22.763  24.622  25.327  1.00 34.84           C
ATOM   1177  N   PRO A 183      20.272  23.480  21.566  1.00 32.37           N
ATOM   1178  CA  PRO A 183      19.931  22.921  20.253  1.00 31.01           C
ATOM   1179  C   PRO A 183      18.912  23.790  19.503  1.00 29.64           C
ATOM   1180  O   PRO A 183      17.915  23.292  18.963  1.00 28.78           O
ATOM   1181  CB  PRO A 183      19.328  21.570  20.619  1.00 31.41           C
ATOM   1182  CG  PRO A 183      18.673  21.801  21.951  1.00 32.01           C
ATOM   1183  CD  PRO A 183      19.394  22.934  22.620  1.00 32.31           C
ATOM   1184  N   ILE A 184      19.208  25.085  19.459  1.00 27.89           N
ATOM   1185  CA  ILE A 184      18.358  26.104  18.855  1.00 26.36           C
ATOM   1186  C   ILE A 184      17.994  25.794  17.397  1.00 25.09           C
ATOM   1187  O   ILE A 184      16.944  26.217  16.909  1.00 24.14           O
ATOM   1188  CB  ILE A 184      19.042  27.508  19.028  1.00 26.74           C
ATOM   1189  CG1 ILE A 184      18.573  28.161  20.335  1.00 27.39           C
ATOM   1190  CD1 ILE A 184      19.678  28.809  21.158  1.00 28.47           C
ATOM   1191  CG2 ILE A 184      18.802  28.430  17.828  1.00 25.89           C
ATOM   1192  N   LYS A 185      18.847  25.031  16.718  1.00 23.81           N
ATOM   1193  CA  LYS A 185      18.609  24.697  15.316  1.00 22.96           C
ATOM   1194  C   LYS A 185      17.531  23.626  15.104  1.00 22.85           C
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FIG. 5T

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ATOM   1195  O   LYS A 185      17.097  23.404  13.973  1.00 22.66           O
ATOM   1196  CB  LYS A 185      19.919  24.338  14.609  1.00 22.77           C
ATOM   1197  CG  LYS A 185      20.730  25.562  14.203  1.00 21.39           C
ATOM   1198  CD  LYS A 185      22.182  25.206  13.920  1.00 20.35           C
ATOM   1199  CE  LYS A 185      23.029  26.453  13.674  1.00 20.37           C
ATOM   1200  NZ  LYS A 185      23.928  26.311  12.485  1.00 19.49           N
ATOM   1201  N   TRP A 186      17.104  22.982  16.194  1.00 22.62           N
ATOM   1202  CA  TRP A 186      16.002  22.010  16.185  1.00 22.33           C
ATOM   1203  C   TRP A 186      14.740  22.555  16.866  1.00 22.97           C
ATOM   1204  O   TRP A 186      13.693  21.899  16.876  1.00 23.08           O
ATOM   1205  CB  TRP A 186      16.432  20.698  16.871  1.00 21.32           C
ATOM   1206  CG  TRP A 186      17.310  19.853  16.016  1.00 19.73           C
ATOM   1207  CD1 TRP A 186      16.942  18.750  15.303  1.00 19.03           C
ATOM   1208  NE1 TRP A 186      18.020  18.249  14.611  1.00 18.84           N
ATOM   1209  CE2 TRP A 186      19.120  19.028  14.872  1.00 18.48           C
ATOM   1210  CD2 TRP A 186      18.708  20.055  15.749  1.00 18.88           C
ATOM   1211  CE3 TRP A 186      19.661  20.997  16.174  1.00 18.93           C
ATOM   1212  CZ3 TRP A 186      20.974  20.887  15.712  1.00 18.06           C
ATOM   1213  CH2 TRP A 186      21.348  19.854  14.837  1.00 17.52           C
ATOM   1214  CZ2 TRP A 186      20.438  18.918  14.405  1.00 18.20           C
ATOM   1215  N   MET A 187      14.841  23.755  17.435  1.00 23.39           N
ATOM   1216  CA  MET A 187      13.775  24.307  18.273  1.00 23.57           C
ATOM   1217  C   MET A 187      12.724  25.075  17.483  1.00 23.43           C
ATOM   1218  O   MET A 187      13.046  25.757  16.503  1.00 22.77           O
ATOM   1219  CB  MET A 187      14.366  25.233  19.340  1.00 24.11           C
ATOM   1220  CG  MET A 187      15.173  24.546  20.430  1.00 25.91           C
ATOM   1221  SD  MET A 187      15.856  25.764  21.577  1.00 27.80           S
ATOM   1222  CE  MET A 187      16.354  24.734  22.912  1.00 29.88           C
ATOM   1223  N   ALA A 188      11.471  24.969  17.931  1.00 23.51           N
ATOM   1224  CA  ALA A 188      10.369  25.768  17.397  1.00 23.42           C
ATOM   1225  C   ALA A 188      10.548  27.224  17.782  1.00 23.86           C
ATOM   1226  O   ALA A 188      11.052  27.529  18.867  1.00 23.74           O
ATOM   1227  CB  ALA A 188       9.049  25.269  17.923  1.00 23.97           C
ATOM   1228  N   LEU A 189      10.122  28.120  16.894  1.00 23.46           N
ATOM   1229  CA  LEU A 189      10.252  29.556  17.116  1.00 23.33           C
ATOM   1230  C   LEU A 189       9.754  30.012  18.503  1.00 22.77           C
ATOM   1231  O   LEU A 189      10.386  30.845  19.145  1.00 22.70           O
ATOM   1232  CB  LEU A 189       9.556  30.339  15.992  1.00 23.03           C
ATOM   1233  CG  LEU A 189       9.810  31.850  16.017  1.00 24.06           C
ATOM   1234  CD1 LEU A 189      11.118  32.210  15.327  1.00 24.21           C
ATOM   1235  CD2 LEU A 189       8.640  32.618  15.412  1.00 24.58           C
ATOM   1236  N   GLU A 190       8.628  29.464  18.956  1.00 22.39           N
ATOM   1237  CA  GLU A 190       8.091  29.809  20.269  1.00 22.22           C
ATOM   1238  C   GLU A 190       8.980  29.286  21.399  1.00 22.30           C
ATOM   1239  O   GLU A 190       8.964  29.826  22.512  1.00 22.15           O
ATOM   1240  CB  GLU A 190       6.655  29.299  20.424  1.00 22.28           C
ATOM   1241  CG  GLU A 190       6.526  27.784  20.499  1.00 22.56           C
ATOM   1242  CD  GLU A 190       6.208  27.132  19.168  1.00 21.94           C
ATOM   1243  OE1 GLU A 190       5.625  26.035  19.195  1.00 23.30           O
ATOM   1244  OE2 GLU A 190       6.543  27.692  18.103  1.00 21.29           O
ATOM   1245  N   SER A 191       9.761  28.246  21.104  1.00 22.37           N
ATOM   1246  CA  SER A 191      10.684  27.667  22.083  1.00 22.95           C
ATOM   1247  C   SER A 191      11.905  28.549  22.255  1.00 23.25           C
ATOM   1248  O   SER A 191      12.376  28.747  23.373  1.00 23.31           O
ATOM   1249  CB  SER A 191      11.096  26.243  21.702  1.00 22.56           C
ATOM   1250  OG  SER A 191       9.974  25.376  21.685  1.00 22.32           O
ATOM   1251  N   ILE A 192      12.400  29.101  21.155  1.00 23.97           N
ATOM   1252  CA  ILE A 192      13.561  29.980  21.230  1.00 25.49           C
ATOM   1253  C   ILE A 192      13.206  31.314  21.882  1.00 25.96           C
ATOM   1254  O   ILE A 192      13.903  31.756  22.796  1.00 26.30           O
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FIG. 5U

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ATOM   1255  CB  ILE A 192      14.223  30.217  19.850  1.00 25.50           C
ATOM   1256  CG1 ILE A 192      14.327  28.916  19.040  1.00 25.40           C
ATOM   1257  CD1 ILE A 192      14.569  29.122  17.549  1.00 25.46           C
ATOM   1258  CG2 ILE A 192      15.599  30.835  20.048  1.00 26.28           C
ATOM   1259  N   LEU A 193      12.120  31.934  21.418  1.00 26.25           N
ATOM   1260  CA  LEU A 193      11.747  33.278  21.863  1.00 26.69           C
ATOM   1261  C   LEU A 193      11.138  33.323  23.260  1.00 26.63           C
ATOM   1262  O   LEU A 193      11.355  34.288  23.986  1.00 27.00           O
ATOM   1263  CB  LEU A 193      10.779  33.952  20.875  1.00 26.51           C
ATOM   1264  CG  LEU A 193      11.204  34.213  19.431  1.00 27.25           C
ATOM   1265  CD1 LEU A 193       9.986  34.570  18.592  1.00 27.23           C
ATOM   1266  CD2 LEU A 193      12.269  35.301  19.333  1.00 27.77           C
ATOM   1267  N   HIS A 194      10.370  32.296  23.624  1.00 26.80           N
ATOM   1268  CA  HIS A 194       9.576  32.324  24.854  1.00 26.71           C
ATOM   1269  C   HIS A 194       9.811  31.151  25.784  1.00 26.65           C
ATOM   1270  O   HIS A 194       9.300  31.143  26.899  1.00 26.84           O
ATOM   1271  CB  HIS A 194       8.080  32.403  24.534  1.00 27.00           C
ATOM   1272  CG  HIS A 194       7.724  33.456  23.528  1.00 27.89           C
ATOM   1273  ND1 HIS A 194       8.074  34.781  23.678  1.00 28.32           N
ATOM   1274  CE1 HIS A 194       7.630  35.472  22.644  1.00 28.99           C
ATOM   1275  NE2 HIS A 194       7.000  34.643  21.830  1.00 29.74           N
ATOM   1276  CD2 HIS A 194       7.043  33.377  22.361  1.00 28.04           C
ATOM   1277  N   ARG A 195      10.570  30.156  25.325  1.00 26.92           N
ATOM   1278  CA  ARG A 195      10.780  28.912  26.082  1.00 26.59           C
ATOM   1279  C   ARG A 195       9.465  28.151  26.370  1.00 26.41           C
ATOM   1280  O   ARG A 195       9.324  27.488  27.402  1.00 26.41           O
ATOM   1281  CB  ARG A 195      11.582  29.167  27.369  1.00 26.71           C
ATOM   1282  CG  ARG A 195      12.960  29.777  27.136  1.00 26.74           C
ATOM   1283  CD  ARG A 195      14.101  28.786  27.220  1.00 26.21           C
ATOM   1284  N   ILE A 196       8.516  28.263  25.443  1.00 25.89           N
ATOM   1285  CA  ILE A 196       7.310  27.439  25.441  1.00 25.99           C
ATOM   1286  C   ILE A 196       7.605  26.110  24.723  1.00 25.37           C
ATOM   1287  O   ILE A 196       8.162  26.098  23.619  1.00 25.06           O
ATOM   1288  CB  ILE A 196       6.130  28.195  24.758  1.00 26.18           C
ATOM   1289  CG1 ILE A 196       5.750  29.443  25.562  1.00 26.92           C
ATOM   1290  CD1 ILE A 196       5.022  30.515  24.750  1.00 27.60           C
ATOM   1291  CG2 ILE A 196       4.912  27.288  24.597  1.00 26.16           C
ATOM   1292  N   TYR A 197       7.244  25.004  25.372  1.00 24.61           N
ATOM   1293  CA  TYR A 197       7.393  23.667  24.812  1.00 24.00           C
ATOM   1294  C   TYR A 197       6.072  22.926  24.894  1.00 23.38           C
ATOM   1295  O   TYR A 197       5.534  22.721  25.972  1.00 23.52           O
ATOM   1296  CB  TYR A 197       8.453  22.866  25.563  1.00 24.16           C
ATOM   1297  CG  TYR A 197       9.860  23.378  25.400  1.00 24.86           C
ATOM   1298  CD1 TYR A 197      10.683  22.891  24.391  1.00 24.84           C
ATOM   1299  CE1 TYR A 197      11.980  23.354  24.239  1.00 24.86           C
ATOM   1300  CZ  TYR A 197      12.465  24.311  25.102  1.00 25.63           C
ATOM   1301  OH  TYR A 197      13.749  24.762  24.951  1.00 27.70           O
ATOM   1302  CE2 TYR A 197      11.674  24.814  26.119  1.00 25.54           C
ATOM   1303  CD2 TYR A 197      10.377  24.344  26.266  1.00 25.42           C
ATOM   1304  N   THR A 198       5.551  22.536  23.739  1.00 22.68           N
ATOM   1305  CA  THR A 198       4.330  21.748  23.661  1.00 21.60           C
ATOM   1306  C   THR A 198       4.578  20.581  22.712  1.00 21.30           C
ATOM   1307  O   THR A 198       5.687  20.424  22.190  1.00 20.65           O
ATOM   1308  CB  THR A 198       3.183  22.600  23.103  1.00 21.35           C
ATOM   1309  OG1 THR A 198       3.516  22.976  21.764  1.00 20.86           O
ATOM   1310  CG2 THR A 198       3.059  23.934  23.844  1.00 20.48           C
ATOM   1311  N   HIS A 199       3.544  19.778  22.468  1.00 20.37           N
ATOM   1312  CA  HIS A 199       3.650  18.715  21.473  1.00 20.11           C
ATOM   1313  C   HIS A 199       3.859  19.272  20.059  1.00 19.90           C
ATOM   1314  O   HIS A 199       4.593  18.679  19.266  1.00 20.32           O
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FIG. 5V

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ATOM   1315  CB  HIS A 199       2.433  17.793  21.522  1.00 19.71           C
ATOM   1316  CG  HIS A 199       2.009  17.440  22.909  1.00 18.90           C
ATOM   1317  ND1 HIS A 199       2.810  16.726  23.770  1.00 18.63           N
ATOM   1318  CE1 HIS A 199       2.182  16.569  24.922  1.00 19.12           C
ATOM   1319  NE2 HIS A 199       1.006  17.170  24.842  1.00 17.97           N
ATOM   1320  CD2 HIS A 199       0.875  17.726  23.596  1.00 18.15           C
ATOM   1321  N   GLN A 200       3.225  20.411  19.767  1.00 19.30           N
ATOM   1322  CA  GLN A 200       3.398  21.125  18.496  1.00 18.44           C
ATOM   1323  C   GLN A 200       4.818  21.653  18.323  1.00 18.49           C
ATOM   1324  O   GLN A 200       5.323  21.756  17.203  1.00 18.42           O
ATOM   1325  CB  GLN A 200       2.384  22.270  18.373  1.00 17.83           C
ATOM   1326  CG  GLN A 200       0.929  21.809  18.182  1.00 16.67           C
ATOM   1327  CD  GLN A 200       0.814  20.578  17.302  1.00 17.53           C
ATOM   1328  OE1 GLN A 200       0.836  19.449  17.798  1.00 18.58           O
ATOM   1329  NE2 GLN A 200       0.704  20.788  15.998  1.00 17.73           N
ATOM   1330  N   SER A 201       5.451  21.985  19.443  1.00 18.47           N
ATOM   1331  CA  SER A 201       6.865  22.338  19.471  1.00 19.01           C
ATOM   1332  C   SER A 201       7.721  21.131  19.083  1.00 18.77           C
ATOM   1333  O   SER A 201       8.684  21.263  18.321  1.00 19.46           O
ATOM   1334  CB  SER A 201       7.250  22.835  20.859  1.00 19.02           C
ATOM   1335  OG  SER A 201       8.541  23.382  20.837  1.00 21.15           O
ATOM   1336  N   ASP A 202       7.358  19.958  19.600  1.00 18.15           N
ATOM   1337  CA  ASP A 202       7.995  18.707  19.199  1.00 17.70           C
ATOM   1338  C   ASP A 202       7.790  18.416  17.702  1.00 17.27           C
ATOM   1339  O   ASP A 202       8.660  17.821  17.062  1.00 16.39           O
ATOM   1340  CB  ASP A 202       7.491  17.536  20.060  1.00 17.82           C
ATOM   1341  CG  ASP A 202       8.248  17.401  21.395  1.00 18.25           C
ATOM   1342  OD1 ASP A 202       7.815  16.578  22.240  1.00 19.15           O
ATOM   1343  OD2 ASP A 202       9.275  18.055  21.693  1.00 16.73           O
ATOM   1344  N   VAL A 203       6.651  18.846  17.147  1.00 16.84           N
ATOM   1345  CA  VAL A 203       6.355  18.615  15.729  1.00 17.10           C
ATOM   1346  C   VAL A 203       7.367  19.329  14.828  1.00 17.03           C
ATOM   1347  O   VAL A 203       7.834  18.760  13.833  1.00 17.52           O
ATOM   1348  CB  VAL A 203       4.898  18.996  15.355  1.00 17.35           C
ATOM   1349  CG1 VAL A 203       4.711  19.069  13.818  1.00 17.32           C
ATOM   1350  CG2 VAL A 203       3.928  18.002  15.953  1.00 16.31           C
ATOM   1351  N   TRP A 204       7.710  20.560  15.206  1.00 16.10           N
ATOM   1352  CA  TRP A 204       8.753  21.336  14.557  1.00 15.91           C
ATOM   1353  C   TRP A 204      10.102  20.608  14.569  1.00 15.34           C
ATOM   1354  O   TRP A 204      10.788  20.536  13.545  1.00 14.63           O
ATOM   1355  CB  TRP A 204       8.899  22.705  15.248  1.00 16.48           C
ATOM   1356  CG  TRP A 204       9.950  23.584  14.629  1.00 17.32           C
ATOM   1357  CD1 TRP A 204      11.291  23.318  14.510  1.00 18.24           C
ATOM   1358  NE1 TRP A 204      11.929  24.357  13.876  1.00 17.48           N
ATOM   1359  CE2 TRP A 204      11.005  25.327  13.584  1.00 19.12           C
ATOM   1360  CD2 TRP A 204       9.749  24.869  14.042  1.00 18.39           C
ATOM   1361  CE3 TRP A 204       8.633  25.699  13.871  1.00 17.73           C
ATOM   1362  CZ3 TRP A 204       8.799  26.918  13.254  1.00 17.80           C
ATOM   1363  CH2 TRP A 204      10.055  27.340  12.801  1.00 18.87           C
ATOM   1364  CZ2 TRP A 204      11.167  26.566  12.953  1.00 19.46           C
ATOM   1365  N   SER A 205      10.482  20.084  15.731  1.00 15.10           N
ATOM   1366  CA  SER A 205      11.735  19.338  15.863  1.00 15.25           C
ATOM   1367  C   SER A 205      11.733  18.081  14.991  1.00 14.79           C
ATOM   1368  O   SER A 205      12.764  17.709  14.411  1.00 14.59           O
ATOM   1369  CB  SER A 205      12.000  18.990  17.323  1.00 15.02           C
ATOM   1370  OG  SER A 205      12.167  20.181  18.070  1.00 16.99           O
ATOM   1371  N   TYR A 206      10.561  17.453  14.891  1.00 14.26           N
ATOM   1372  CA  TYR A 206      10.366  16.298  14.025  1.00 13.63           C
ATOM   1373  C   TYR A 206      10.655  16.661  12.566  1.00 13.14           C
ATOM   1374  O   TYR A 206      11.369  15.924  11.874  1.00 13.08           O
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FIG. 5W

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ATOM   1375  CB  TYR A 206       8.957  15.725  14.210  1.00 13.55           C
ATOM   1376  CG  TYR A 206       8.588  14.665  13.214  1.00 13.29           C
ATOM   1377  CD1 TYR A 206       7.982  14.999  11.993  1.00 12.45           C
ATOM   1378  CE1 TYR A 206       7.651  14.014  11.072  1.00 14.04           C
ATOM   1379  CZ  TYR A 206       7.920  12.674  11.378  1.00 13.69           C
ATOM   1380  OH  TYR A 206       7.608  11.678  10.492  1.00 14.65           O
ATOM   1381  CE2 TYR A 206       8.516  12.329  12.573  1.00 14.49           C
ATOM   1382  CD2 TYR A 206       8.848  13.321  13.486  1.00 13.52           C
ATOM   1383  N   GLY A 207      10.123  17.799  12.112  1.00 12.72           N
ATOM   1384  CA  GLY A 207      10.437  18.342  10.795  1.00 12.45           C
ATOM   1385  C   GLY A 207      11.934  18.458  10.495  1.00 13.29           C
ATOM   1386  O   GLY A 207      12.395  18.056   9.422  1.00 13.01           O
ATOM   1387  N   VAL A 208      12.699  19.001  11.441  1.00 13.39           N
ATOM   1388  CA  VAL A 208      14.147  19.117  11.276  1.00 13.82           C
ATOM   1389  C   VAL A 208      14.801  17.727  11.229  1.00 14.23           C
ATOM   1390  O   VAL A 208      15.635  17.451  10.360  1.00 14.47           O
ATOM   1391  CB  VAL A 208      14.790  20.011  12.373  1.00 13.67           C
ATOM   1392  CG1 VAL A 208      16.292  20.150  12.144  1.00 13.84           C
ATOM   1393  CG2 VAL A 208      14.128  21.388  12.397  1.00 12.06           C
ATOM   1394  N   THR A 209      14.398  16.853  12.148  1.00 14.37           N
ATOM   1395  CA  THR A 209      14.874  15.471  12.172  1.00 15.20           C
ATOM   1396  C   THR A 209      14.654  14.774  10.824  1.00 15.26           C
ATOM   1397  O   THR A 209      15.571  14.137  10.291  1.00 15.59           O
ATOM   1398  CB  THR A 209      14.184  14.690  13.300  1.00 14.65           C
ATOM   1399  OG1 THR A 209      14.427  15.358  14.542  1.00 16.24           O
ATOM   1400  CG2 THR A 209      14.838  13.342  13.496  1.00 14.51           C
ATOM   1401  N   VAL A 210      13.446  14.915  10.277  1.00 15.58           N
ATOM   1402  CA  VAL A 210      13.112  14.346   8.973  1.00 15.63           C
ATOM   1403  C   VAL A 210      14.022  14.933   7.898  1.00 15.81           C
ATOM   1404  O   VAL A 210      14.568  14.196   7.073  1.00 16.62           O
ATOM   1405  CB  VAL A 210      11.600  14.494   8.642  1.00 16.20           C
ATOM   1406  CG1 VAL A 210      11.318  14.258   7.159  1.00 15.96           C
ATOM   1407  CG2 VAL A 210      10.773  13.530   9.495  1.00 14.14           C
ATOM   1408  N   TRP A 211      14.238  16.243   7.951  1.00 15.66           N
ATOM   1409  CA  TRP A 211      15.185  16.902   7.045  1.00 15.68           C
ATOM   1410  C   TRP A 211      16.596  16.293   7.128  1.00 15.43           C
ATOM   1411  O   TRP A 211      17.213  16.045   6.090  1.00 14.91           O
ATOM   1412  CB  TRP A 211      15.230  18.422   7.292  1.00 14.80           C
ATOM   1413  CG  TRP A 211      16.078  19.158   6.320  1.00 14.08           C
ATOM   1414  CD1 TRP A 211      15.693  19.656   5.108  1.00 13.94           C
ATOM   1415  NE1 TRP A 211      16.754  20.281   4.492  1.00 15.12           N
ATOM   1416  CE2 TRP A 211      17.859  20.187   5.295  1.00 15.19           C
ATOM   1417  CD2 TRP A 211      17.470  19.486   6.463  1.00 15.80           C
ATOM   1418  CE3 TRP A 211      18.436  19.253   7.458  1.00 15.56           C
ATOM   1419  CZ3 TRP A 211      19.739  19.726   7.259  1.00 15.37           C
ATOM   1420  CH2 TRP A 211      20.085  20.426   6.093  1.00 15.50           C
ATOM   1421  CZ2 TRP A 211      19.165  20.660   5.097  1.00 16.49           C
ATOM   1422  N   GLU A 212      17.089  16.063   8.352  1.00 15.91           N
ATOM   1423  CA  GLU A 212      18.391  15.402   8.592  1.00 16.30           C
ATOM   1424  C   GLU A 212      18.495  14.048   7.917  1.00 16.81           C
ATOM   1425  O   GLU A 212      19.518  13.729   7.322  1.00 17.85           O
ATOM   1426  CB  GLU A 212      18.656  15.191  10.087  1.00 16.54           C
ATOM   1427  CG  GLU A 212      18.997  16.435  10.886  1.00 16.04           C
ATOM   1428  CD  GLU A 212      19.317  16.104  12.334  1.00 16.27           C
ATOM   1429  OE1 GLU A 212      20.504  15.909  12.641  1.00 16.31           O
ATOM   1430  OE2 GLU A 212      18.381  16.039  13.168  1.00 16.78           O
ATOM   1431  N   LEU A 213      17.444  13.241   8.030  1.00 17.14           N
ATOM   1432  CA  LEU A 213      17.421  11.922   7.396  1.00 17.73           C
ATOM   1433  C   LEU A 213      17.379  12.010   5.877  1.00 18.34           C
ATOM   1434  O   LEU A 213      18.054  11.235   5.195  1.00 18.78           O
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FIG. 5X

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ATOM   1435  CB  LEU A 213      16.228  11.093   7.888  1.00 17.19           C
ATOM   1436  CG  LEU A 213      16.002  10.959   9.393  1.00 17.49           C
ATOM   1437  CD1 LEU A 213      14.740  10.111   9.696  1.00 15.99           C
ATOM   1438  CD2 LEU A 213      17.262  10.385  10.065  1.00 17.13           C
ATOM   1439  N   MET A 214      16.576  12.944   5.359  1.00 18.90           N
ATOM   1440  CA  MET A 214      16.388  13.109   3.917  1.00 19.52           C
ATOM   1441  C   MET A 214      17.655  13.597   3.198  1.00 19.26           C
ATOM   1442  O   MET A 214      17.820  13.352   2.007  1.00 19.42           O
ATOM   1443  CB  MET A 214      15.214  14.048   3.615  1.00 19.99           C
ATOM   1444  CG  MET A 214      13.822  13.488   3.928  1.00 21.85           C
ATOM   1445  SD  MET A 214      13.590  11.766   3.421  1.00 25.97           S
ATOM   1446  CE  MET A 214      11.901  11.510   3.898  1.00 25.02           C
ATOM   1447  N   THR A 215      18.527  14.292   3.925  1.00 18.67           N
ATOM   1448  CA  THR A 215      19.812  14.749   3.401  1.00 18.65           C
ATOM   1449  C   THR A 215      20.957  13.818   3.805  1.00 19.03           C
ATOM   1450  O   THR A 215      22.121  14.155   3.599  1.00 19.86           O
ATOM   1451  CB  THR A 215      20.149  16.156   3.926  1.00 18.53           C
ATOM   1452  OG1 THR A 215      20.177  16.134   5.364  1.00 19.23           O
ATOM   1453  CG2 THR A 215      19.060  17.174   3.569  1.00 17.20           C
ATOM   1454  N   PHE A 216      20.630  12.671   4.406  1.00 18.91           N
ATOM   1455  CA  PHE A 216      21.627  11.707   4.892  1.00 18.62           C
ATOM   1456  C   PHE A 216      22.591  12.302   5.921  1.00 18.49           C
ATOM   1457  O   PHE A 216      23.773  11.938   5.968  1.00 18.09           O
ATOM   1458  CB  PHE A 216      22.400  11.063   3.730  1.00 18.90           C
ATOM   1459  CG  PHE A 216      21.525  10.372   2.723  1.00 19.02           C
ATOM   1460  CD1 PHE A 216      21.113   9.060   2.925  1.00 19.29           C
ATOM   1461  CE1 PHE A 216      20.306   8.419   2.001  1.00 19.46           C
ATOM   1462  CZ  PHE A 216      19.900   9.094   0.848  1.00 19.99           C
ATOM   1463  CE2 PHE A 216      20.300  10.407   0.637  1.00 19.88           C
ATOM   1464  CD2 PHE A 216      21.114  11.036   1.570  1.00 19.88           C
ATOM   1465  N   GLY A 217      22.079  13.230   6.731  1.00 18.54           N
ATOM   1466  CA  GLY A 217      22.787  13.715   7.902  1.00 18.62           C
ATOM   1467  C   GLY A 217      23.525  15.031   7.759  1.00 19.01           C
ATOM   1468  O   GLY A 217      24.528  15.250   8.441  1.00 19.29           O
ATOM   1469  N   SER A 218      23.035  15.897   6.873  1.00 19.27           N
ATOM   1470  CA  SER A 218      23.532  17.259   6.755  1.00 19.49           C
ATOM   1471  C   SER A 218      23.151  18.031   8.008  1.00 20.23           C
ATOM   1472  O   SER A 218      22.185  17.677   8.705  1.00 19.99           O
ATOM   1473  CB  SER A 218      22.954  17.947   5.520  1.00 19.54           C
ATOM   1474  OG  SER A 218      23.303  17.248   4.335  1.00 20.51           O
ATOM   1475  N   LYS A 219      23.920  19.078   8.293  1.00 20.46           N
ATOM   1476  CA  LYS A 219      23.733  19.870   9.493  1.00 21.27           C
ATOM   1477  C   LYS A 219      22.820  21.039   9.185  1.00 21.76           C
ATOM   1478  O   LYS A 219      23.096  21.822   8.274  1.00 22.17           O
ATOM   1479  CB  LYS A 219      25.077  20.373  10.012  1.00 21.65           C
ATOM   1480  CG  LYS A 219      26.084  19.274  10.319  1.00 22.85           C
ATOM   1481  CD  LYS A 219      27.035  19.710  11.427  1.00 25.41           C
ATOM   1482  CE  LYS A 219      28.454  19.776  10.919  1.00 26.27           C
ATOM   1483  NZ  LYS A 219      29.083  18.421  11.009  1.00 28.06           N
ATOM   1484  N   PRO A 220      21.735  21.159   9.946  1.00 22.25           N
ATOM   1485  CA  PRO A 220      20.718  22.182   9.694  1.00 22.20           C
ATOM   1486  C   PRO A 220      21.304  23.584   9.813  1.00 22.73           C
ATOM   1487  O   PRO A 220      21.984  23.868  10.794  1.00 22.13           O
ATOM   1488  CB  PRO A 220      19.698  21.941  10.808  1.00 22.46           C
ATOM   1489  CG  PRO A 220      19.934  20.546  11.250  1.00 22.59           C
ATOM   1490  CD  PRO A 220      21.413  20.332  11.126  1.00 22.16           C
ATOM   1491  N   TYR A 221      21.043  24.433   8.817  1.00 23.20           N
ATOM   1492  CA  TYR A 221      21.544  25.811   8.789  1.00 23.78           C
ATOM   1493  C   TYR A 221      23.060  25.894   9.010  1.00 24.48           C
ATOM   1494  O   TYR A 221      23.537  26.744   9.759  1.00 24.27           O
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FIG. 5Y

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ATOM   1495  CB  TYR A 221      20.808  26.691   9.815  1.00 23.69           C
ATOM   1496  CG  TYR A 221      19.322  26.416   9.985  1.00 23.37           C
ATOM   1497  CD1 TYR A 221      18.375  27.068   9.197  1.00 22.54           C
ATOM   1498  CE1 TYR A 221      17.011  26.833   9.365  1.00 22.37           C
ATOM   1499  CZ  TYR A 221      16.586  25.939  10.332  1.00 22.50           C
ATOM   1500  OH  TYR A 221      15.246  25.698  10.502  1.00 23.84           O
ATOM   1501  CE2 TYR A 221      17.501  25.275  11.128  1.00 22.72           C
ATOM   1502  CD2 TYR A 221      18.864  25.526  10.962  1.00 23.51           C
ATOM   1503  N   ASP A 222      23.799  24.983   8.380  1.00 25.44           N
ATOM   1504  CA  ASP A 222      25.260  24.994   8.396  1.00 26.85           C
ATOM   1505  C   ASP A 222      25.785  26.354   7.931  1.00 27.42           C
ATOM   1506  O   ASP A 222      25.450  26.801   6.836  1.00 27.17           O
ATOM   1507  CB  ASP A 222      25.791  23.887   7.475  1.00 27.21           C
ATOM   1508  CG  ASP A 222      27.180  23.390   7.870  1.00 28.40           C
ATOM   1509  OD1 ASP A 222      27.587  23.591   9.032  1.00 28.08           O
ATOM   1510  OD2 ASP A 222      27.929  22.771   7.077  1.00 29.38           O
ATOM   1511  N   GLY A 223      26.584  27.012   8.772  1.00 28.11           N
ATOM   1512  CA  GLY A 223      27.174  28.298   8.429  1.00 28.87           C
ATOM   1513  C   GLY A 223      26.514  29.498   9.088  1.00 29.68           C
ATOM   1514  O   GLY A 223      27.079  30.589   9.109  1.00 30.14           O
ATOM   1515  N   ILE A 224      25.318  29.301   9.631  1.00 29.85           N
ATOM   1516  CA  ILE A 224      24.608  30.369  10.316  1.00 30.14           C
ATOM   1517  C   ILE A 224      24.776  30.225  11.828  1.00 30.76           C
ATOM   1518  O   ILE A 224      24.560  29.142  12.375  1.00 30.59           O
ATOM   1519  CB  ILE A 224      23.121  30.366   9.919  1.00 30.03           C
ATOM   1520  CG1 ILE A 224      22.990  30.407   8.396  1.00 29.96           C
ATOM   1521  CD1 ILE A 224      21.940  29.488   7.860  1.00 30.12           C
ATOM   1522  CG2 ILE A 224      22.371  31.541  10.556  1.00 28.97           C
ATOM   1523  N   PRO A 225      25.174  31.311  12.498  1.00 31.26           N
ATOM   1524  CA  PRO A 225      25.301  31.308  13.956  1.00 31.31           C
ATOM   1525  C   PRO A 225      23.954  30.999  14.600  1.00 31.43           C
ATOM   1526  O   PRO A 225      22.914  31.427  14.089  1.00 31.28           O
ATOM   1527  CB  PRO A 225      25.732  32.749  14.271  1.00 31.36           C
ATOM   1528  CG  PRO A 225      26.346  33.247  13.016  1.00 31.12           C
ATOM   1529  CD  PRO A 225      25.534  32.626  11.924  1.00 31.41           C
ATOM   1530  N   ALA A 226      23.978  30.246  15.694  1.00 31.44           N
ATOM   1531  CA  ALA A 226      22.773  29.953  16.454  1.00 32.22           C
ATOM   1532  C   ALA A 226      21.982  31.231  16.778  1.00 32.62           C
ATOM   1533  O   ALA A 226      20.746  31.218  16.796  1.00 32.15           O
ATOM   1534  CB  ALA A 226      23.124  29.197  17.731  1.00 32.17           C
ATOM   1535  N   SER A 227      22.709  32.330  17.001  1.00 32.90           N
ATOM   1536  CA  SER A 227      22.118  33.608  17.404  1.00 33.47           C
ATOM   1537  C   SER A 227      21.211  34.246  16.351  1.00 33.52           C
ATOM   1538  O   SER A 227      20.327  35.037  16.691  1.00 33.90           O
ATOM   1539  CB  SER A 227      23.218  34.600  17.793  1.00 33.94           C
ATOM   1540  OG  SER A 227      23.896  35.093  16.644  1.00 35.00           O
ATOM   1541  N   GLU A 228      21.438  33.906  15.083  1.00 33.28           N
ATOM   1542  CA  GLU A 228      20.717  34.510  13.969  1.00 33.05           C
ATOM   1543  C   GLU A 228      19.559  33.634  13.472  1.00 33.32           C
ATOM   1544  O   GLU A 228      18.856  33.990  12.520  1.00 32.92           O
ATOM   1545  CB  GLU A 228      21.691  34.804  12.825  1.00 33.17           C
ATOM   1546  N   ILE A 229      19.355  32.495  14.131  1.00 33.41           N
ATOM   1547  CA  ILE A 229      18.378  31.510  13.674  1.00 33.24           C
ATOM   1548  C   ILE A 229      16.953  32.045  13.808  1.00 33.41           C
ATOM   1549  O   ILE A 229      16.162  31.983  12.858  1.00 33.36           O
ATOM   1550  CB  ILE A 229      18.577  30.149  14.409  1.00 32.76           C
ATOM   1551  CG1 ILE A 229      19.919  29.510  14.020  1.00 32.35           C
ATOM   1552  CD1 ILE A 229      20.036  29.085  12.545  1.00 31.27           C
ATOM   1553  CG2 ILE A 229      17.421  29.189  14.132  1.00 32.57           C
ATOM   1554  N   SER A 230      16.646  32.590  14.981  1.00 33.39           N
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FIG. 5Z

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ATOM   1555  CA  SER A 230      15.353  33.210  15.239  1.00 33.74           C
ATOM   1556  C   SER A 230      14.995  34.265  14.181  1.00 33.34           C
ATOM   1557  O   SER A 230      13.848  34.326  13.711  1.00 33.30           O
ATOM   1558  CB  SER A 230      15.340  33.828  16.635  1.00 33.54           C
ATOM   1559  OG  SER A 230      14.191  34.630  16.803  1.00 35.77           O
ATOM   1560  N   SER A 231      15.984  35.073  13.807  1.00 32.79           N
ATOM   1561  CA  SER A 231      15.806  36.133  12.816  1.00 32.99           C
ATOM   1562  C   SER A 231      15.484  35.593  11.411  1.00 32.68           C
ATOM   1563  O   SER A 231      14.515  36.043  10.785  1.00 32.87           O
ATOM   1564  CB  SER A 231      17.022  37.078  12.814  1.00 33.23           C
ATOM   1565  OG  SER A 231      17.413  37.472  11.507  1.00 34.42           O
ATOM   1566  N   ILE A 232      16.262  34.625  10.924  1.00 31.98           N
ATOM   1567  CA  ILE A 232      15.977  34.042   9.608  1.00 32.09           C
ATOM   1568  C   ILE A 232      14.602  33.354   9.545  1.00 31.80           C
ATOM   1569  O   ILE A 232      13.931  33.399   8.510  1.00 31.72           O
ATOM   1570  CB  ILE A 232      17.141  33.128   9.064  1.00 32.38           C
ATOM   1571  CG1 ILE A 232      17.234  31.796   9.809  1.00 32.87           C
ATOM   1572  CD1 ILE A 232      17.895  30.699   8.996  1.00 33.81           C
ATOM   1573  CG2 ILE A 232      18.494  33.869   9.078  1.00 32.45           C
ATOM   1574  N   LEU A 233      14.179  32.745  10.653  1.00 31.10           N
ATOM   1575  CA  LEU A 233      12.895  32.045  10.697  1.00 30.98           C
ATOM   1576  C   LEU A 233      11.705  33.011  10.636  1.00 31.26           C
ATOM   1577  O   LEU A 233      10.732  32.762   9.920  1.00 30.66           O
ATOM   1578  CB  LEU A 233      12.806  31.130  11.926  1.00 30.75           C
ATOM   1579  CG  LEU A 233      13.704  29.883  11.901  1.00 30.29           C
ATOM   1580  CD1 LEU A 233      13.834  29.273  13.289  1.00 29.86           C
ATOM   1581  CD2 LEU A 233      13.189  28.862  10.899  1.00 29.92           C
ATOM   1582  N   GLU A 234      11.803  34.111  11.381  1.00 31.82           N
ATOM   1583  CA  GLU A 234      10.809  35.187  11.338  1.00 32.74           C
ATOM   1584  C   GLU A 234      10.742  35.851   9.954  1.00 32.56           C
ATOM   1585  O   GLU A 234       9.675  36.292   9.525  1.00 32.91           O
ATOM   1586  CB  GLU A 234      11.073  36.223  12.441  1.00 32.88           C
ATOM   1587  CG  GLU A 234      10.691  35.744  13.834  1.00 34.72           C
ATOM   1588  CD  GLU A 234      11.373  36.523  14.953  1.00 38.13           C
ATOM   1589  OE1 GLU A 234      12.628  36.605  14.970  1.00 38.06           O
ATOM   1590  OE2 GLU A 234      10.647  37.048  15.836  1.00 38.86           O
ATOM   1591  N   LYS A 235      11.875  35.890   9.255  1.00 32.60           N
ATOM   1592  CA  LYS A 235      11.921  36.369   7.870  1.00 32.94           C
ATOM   1593  C   LYS A 235      11.333  35.363   6.871  1.00 32.49           C
ATOM   1594  O   LYS A 235      11.252  35.650   5.677  1.00 32.95           O
ATOM   1595  CB  LYS A 235      13.361  36.698   7.460  1.00 33.46           C
ATOM   1596  CG  LYS A 235      13.792  38.128   7.731  1.00 34.18           C
ATOM   1597  CD  LYS A 235      15.036  38.161   8.614  1.00 35.32           C
ATOM   1598  CE  LYS A 235      16.255  38.639   7.853  1.00 35.91           C
ATOM   1599  NZ  LYS A 235      17.515  38.319   8.588  1.00 36.74           N
ATOM   1600  N   GLY A 236      10.953  34.182   7.352  1.00 31.86           N
ATOM   1601  CA  GLY A 236      10.312  33.174   6.521  1.00 30.53           C
ATOM   1602  C   GLY A 236      11.255  32.178   5.862  1.00 29.96           C
ATOM   1603  O   GLY A 236      10.830  31.393   5.007  1.00 30.10           O
ATOM   1604  N   GLU A 237      12.528  32.206   6.249  1.00 28.50           N
ATOM   1605  CA  GLU A 237      13.507  31.259   5.727  1.00 27.83           C
ATOM   1606  C   GLU A 237      13.347  29.887   6.375  1.00 26.58           C
ATOM   1607  O   GLU A 237      13.135  29.776   7.590  1.00 26.31           O
ATOM   1608  CB  GLU A 237      14.933  31.750   5.966  1.00 28.59           C
ATOM   1609  CG  GLU A 237      15.260  33.126   5.406  1.00 30.58           C
ATOM   1610  CD  GLU A 237      16.732  33.256   5.089  1.00 32.61           C
ATOM   1611  OE1 GLU A 237      17.209  32.465   4.243  1.00 34.70           O
ATOM   1612  OE2 GLU A 237      17.414  34.118   5.690  1.00 32.10           O
ATOM   1613  N   ARG A 238      13.460  28.850   5.555  1.00 24.84           N
ATOM   1614  CA  ARG A 238      13.410  27.476   6.034  1.00 23.97           C
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FIG. 5AA

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ATOM   1615  C   ARG A 238      14.554  26.674   5.420  1.00 23.40           C
ATOM   1616  O   ARG A 238      15.214  27.139   4.500  1.00 23.59           O
ATOM   1617  CB  ARG A 238      12.057  26.829   5.697  1.00 23.36           C
ATOM   1618  CG  ARG A 238      10.844  27.460   6.369  1.00 22.61           C
ATOM   1619  CD  ARG A 238      10.880  27.434   7.889  1.00 22.28           C
ATOM   1620  NE  ARG A 238       9.650  27.959   8.479  1.00 21.42           N
ATOM   1621  CZ  ARG A 238       9.473  29.212   8.887  1.00 21.46           C
ATOM   1622  NH1 ARG A 238      10.452  30.115   8.775  1.00 19.78           N
ATOM   1623  NH2 ARG A 238       8.307  29.561   9.422  1.00 20.88           N
ATOM   1624  N   LEU A 239      14.788  25.477   5.951  1.00 23.06           N
ATOM   1625  CA  LEU A 239      15.751  24.538   5.388  1.00 22.31           C
ATOM   1626  C   LEU A 239      15.342  24.162   3.963  1.00 22.27           C
ATOM   1627  O   LEU A 239      14.165  23.902   3.711  1.00 22.74           O
ATOM   1628  CB  LEU A 239      15.829  23.278   6.264  1.00 21.98           C
ATOM   1629  CG  LEU A 239      16.383  23.461   7.679  1.00 20.93           C
ATOM   1630  CD1 LEU A 239      15.787  22.448   8.656  1.00 17.59           C
ATOM   1631  CD2 LEU A 239      17.905  23.381   7.661  1.00 20.45           C
ATOM   1632  N   PRO A 240      16.300  24.144   3.036  1.00 22.36           N
ATOM   1633  CA  PRO A 240      16.015  23.875   1.614  1.00 22.32           C
ATOM   1634  C   PRO A 240      15.571  22.436   1.315  1.00 22.70           C
ATOM   1635  O   PRO A 240      15.832  21.539   2.113  1.00 23.10           O
ATOM   1636  CB  PRO A 240      17.360  24.140   0.939  1.00 21.99           C
ATOM   1637  CG  PRO A 240      18.369  23.919   2.015  1.00 22.25           C
ATOM   1638  CD  PRO A 240      17.734  24.394   3.278  1.00 22.24           C
ATOM   1639  N   GLN A 241      14.935  22.229   0.164  1.00 22.58           N
ATOM   1640  CA  GLN A 241      14.434  20.919  -0.221  1.00 23.36           C
ATOM   1641  C   GLN A 241      15.578  19.939  -0.504  1.00 23.53           C
ATOM   1642  O   GLN A 241      16.468  20.228  -1.300  1.00 23.49           O
ATOM   1643  CB  GLN A 241      13.514  21.027  -1.439  1.00 23.35           C
ATOM   1644  CG  GLN A 241      12.769  19.740  -1.769  1.00 25.02           C
ATOM   1645  CD  GLN A 241      11.791  19.886  -2.924  1.00 26.48           C
ATOM   1646  OE1 GLN A 241      11.402  20.996  -3.278  1.00 27.61           O
ATOM   1647  NE2 GLN A 241      11.388  18.762  -3.508  1.00 27.11           N
ATOM   1648  N   PRO A 242      15.567  18.794   0.169  1.00 23.73           N
ATOM   1649  CA  PRO A 242      16.552  17.747  -0.104  1.00 23.94           C
ATOM   1650  C   PRO A 242      16.316  17.155  -1.494  1.00 23.79           C
ATOM   1651  O   PRO A 242      15.167  16.913  -1.859  1.00 23.48           O
ATOM   1652  CB  PRO A 242      16.282  16.718   0.997  1.00 23.82           C
ATOM   1653  CG  PRO A 242      15.553  17.498   2.038  1.00 24.29           C
ATOM   1654  CD  PRO A 242      14.648  18.411   1.257  1.00 23.74           C
ATOM   1655  N   PRO A 243      17.393  16.974  -2.256  1.00 23.85           N
ATOM   1656  CA  PRO A 243      17.339  16.405  -3.615  1.00 24.02           C
ATOM   1657  C   PRO A 243      16.460  15.166  -3.792  1.00 23.91           C
ATOM   1658  O   PRO A 243      15.828  15.050  -4.833  1.00 24.44           O
ATOM   1659  CB  PRO A 243      18.808  16.063  -3.903  1.00 23.96           C
ATOM   1660  CG  PRO A 243      19.573  17.090  -3.133  1.00 23.87           C
ATOM   1661  CD  PRO A 243      18.766  17.361  -1.876  1.00 23.68           C
ATOM   1662  N   ILE A 244      16.412  14.265  -2.817  1.00 24.05           N
ATOM   1663  CA  ILE A 244      15.612  13.038  -2.956  1.00 24.12           C
ATOM   1664  C   ILE A 244      14.105  13.238  -2.743  1.00 24.71           C
ATOM   1665  O   ILE A 244      13.318  12.339  -3.043  1.00 24.49           O
ATOM   1666  CB  ILE A 244      16.141  11.891  -2.029  1.00 23.86           C
ATOM   1667  CG1 ILE A 244      16.078  12.297  -0.554  1.00 23.91           C
ATOM   1668  CD1 ILE A 244      15.788  11.139   0.386  1.00 25.03           C
ATOM   1669  CG2 ILE A 244      17.561  11.446  -2.445  1.00 22.93           C
ATOM   1670  N   CYS A 245      13.710  14.407  -2.231  1.00 25.35           N
ATOM   1671  CA  CYS A 245      12.336  14.634  -1.768  1.00 26.36           C
ATOM   1672  C   CYS A 245      11.408  15.120  -2.867  1.00 26.04           C
ATOM   1673  O   CYS A 245      11.696  16.123  -3.512  1.00 26.37           O
ATOM   1674  CB  CYS A 245      12.316  15.675  -0.643  1.00 26.68           C
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FIG. 5BB

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ATOM   1675  SG  CYS A 245      12.891  15.079   0.956  1.00 29.71           S
ATOM   1676  N   THR A 246      10.286  14.430  -3.065  1.00 25.97           N
ATOM   1677  CA  THR A 246       9.234  14.961  -3.930  1.00 26.41           C
ATOM   1678  C   THR A 246       8.598  16.163  -3.259  1.00 26.53           C
ATOM   1679  O   THR A 246       8.764  16.379  -2.049  1.00 26.34           O
ATOM   1680  CB  THR A 246       8.146  13.917  -4.252  1.00 26.72           C
ATOM   1681  OG1 THR A 246       7.689  13.291  -3.043  1.00 27.60           O
ATOM   1682  CG2 THR A 246       8.716  12.776  -5.097  1.00 26.65           C
ATOM   1683  N   ILE A 247       7.867  16.948  -4.047  1.00 26.79           N
ATOM   1684  CA  ILE A 247       7.208  18.146  -3.539  1.00 26.43           C
ATOM   1685  C   ILE A 247       6.324  17.803  -2.339  1.00 26.30           C
ATOM   1686  O   ILE A 247       6.293  18.547  -1.366  1.00 26.86           O
ATOM   1687  CB  ILE A 247       6.419  18.864  -4.668  1.00 26.87           C
ATOM   1688  CG1 ILE A 247       6.049  20.293  -4.248  1.00 26.78           C
ATOM   1689  CG2 ILE A 247       5.185  18.056  -5.098  1.00 26.73           C
ATOM   1690  N   ASP A 248       5.652  16.653  -2.403  1.00 25.73           N
ATOM   1691  CA  ASP A 248       4.764  16.192  -1.344  1.00 25.42           C
ATOM   1692  C   ASP A 248       5.463  16.044   0.012  1.00 25.11           C
ATOM   1693  O   ASP A 248       4.939  16.510   1.034  1.00 25.20           O
ATOM   1694  CB  ASP A 248       4.107  14.873  -1.743  1.00 26.14           C
ATOM   1695  CG  ASP A 248       3.328  14.978  -3.053  1.00 27.68           C
ATOM   1696  OD1 ASP A 248       3.959  14.972  -4.136  1.00 28.63           O
ATOM   1697  OD2 ASP A 248       2.085  15.070  -3.095  1.00 27.81           O
ATOM   1698  N   VAL A 249       6.634  15.402   0.013  1.00 23.56           N
ATOM   1699  CA  VAL A 249       7.411  15.176   1.241  1.00 22.27           C
ATOM   1700  C   VAL A 249       7.865  16.503   1.852  1.00 21.34           C
ATOM   1701  O   VAL A 249       7.631  16.755   3.033  1.00 20.14           O
ATOM   1702  CB  VAL A 249       8.615  14.206   1.002  1.00 22.04           C
ATOM   1703  CG1 VAL A 249       9.521  14.159   2.203  1.00 21.97           C
ATOM   1704  CG2 VAL A 249       8.111  12.801   0.705  1.00 21.72           C
ATOM   1705  N   TYR A 250       8.472  17.359   1.029  1.00 21.08           N
ATOM   1706  CA  TYR A 250       8.893  18.688   1.466  1.00 21.47           C
ATOM   1707  C   TYR A 250       7.743  19.557   2.004  1.00 21.79           C
ATOM   1708  O   TYR A 250       7.948  20.326   2.948  1.00 21.21           O
ATOM   1709  CB  TYR A 250       9.648  19.431   0.352  1.00 21.05           C
ATOM   1710  CG  TYR A 250      10.332  20.706   0.821  1.00 20.50           C
ATOM   1711  CD1 TYR A 250      10.005  21.949   0.257  1.00 20.75           C
ATOM   1712  CE1 TYR A 250      10.624  23.123   0.679  1.00 19.33           C
ATOM   1713  CZ  TYR A 250      11.577  23.061   1.677  1.00 20.22           C
ATOM   1714  OH  TYR A 250      12.188  24.212   2.103  1.00 20.81           O
ATOM   1715  CE2 TYR A 250      11.922  21.840   2.257  1.00 20.09           C
ATOM   1716  CD2 TYR A 250      11.294  20.676   1.830  1.00 19.31           C
ATOM   1717  N   MET A 251       6.550  19.434   1.409  1.00 22.18           N
ATOM   1718  CA  MET A 251       5.381  20.195   1.866  1.00 23.03           C
ATOM   1719  C   MET A 251       5.039  19.834   3.308  1.00 22.94           C
ATOM   1720  O   MET A 251       4.781  20.721   4.123  1.00 22.97           O
ATOM   1721  CB  MET A 251       4.162  20.010   0.946  1.00 23.69           C
ATOM   1722  CG  MET A 251       4.350  20.535  -0.480  1.00 26.38           C
ATOM   1723  SD  MET A 251       3.173  21.801  -1.043  1.00 31.94           S
ATOM   1724  CE  MET A 251       4.311  23.007  -1.795  1.00 29.59           C
ATOM   1725  N   ILE A 252       5.075  18.538   3.625  1.00 22.98           N
ATOM   1726  CA  ILE A 252       4.890  18.075   5.004  1.00 23.33           C
ATOM   1727  C   ILE A 252       5.924  18.672   5.960  1.00 22.47           C
ATOM   1728  O   ILE A 252       5.572  19.117   7.047  1.00 22.57           O
ATOM   1729  CB  ILE A 252       4.890  16.525   5.083  1.00 23.89           C
ATOM   1730  CG1 ILE A 252       3.682  15.957   4.333  1.00 24.47           C
ATOM   1731  CD1 ILE A 252       3.784  14.480   4.037  1.00 26.22           C
ATOM   1732  CG2 ILE A 252       4.868  16.065   6.534  1.00 24.02           C
ATOM   1733  N   MET A 253       7.188  18.693   5.545  1.00 22.24           N
ATOM   1734  CA  MET A 253       8.258  19.315   6.340  1.00 22.01           C
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FIG. 5CC

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ATOM   1735  C   MET A 253       8.011  20.803   6.558  1.00 20.97           C
ATOM   1736  O   MET A 253       8.200  21.312   7.654  1.00 20.96           O
ATOM   1737  CB  MET A 253       9.619  19.148   5.665  1.00 22.41           C
ATOM   1738  CG  MET A 253      10.166  17.732   5.624  1.00 23.98           C
ATOM   1739  SD  MET A 253      11.819  17.718   4.863  1.00 25.73           S
ATOM   1740  CE  MET A 253      11.523  16.543   3.614  1.00 24.41           C
ATOM   1741  N   VAL A 254       7.613  21.499   5.498  1.00 20.48           N
ATOM   1742  CA  VAL A 254       7.333  22.938   5.576  1.00 19.92           C
ATOM   1743  C   VAL A 254       6.183  23.200   6.554  1.00 19.02           C
ATOM   1744  O   VAL A 254       6.271  24.094   7.396  1.00 17.82           O
ATOM   1745  CB  VAL A 254       7.070  23.554   4.163  1.00 19.97           C
ATOM   1746  CG1 VAL A 254       6.283  24.861   4.246  1.00 20.08           C
ATOM   1747  CG2 VAL A 254       8.384  23.795   3.455  1.00 20.32           C
ATOM   1748  N   LYS A 255       5.130  22.389   6.451  1.00 18.68           N
ATOM   1749  CA  LYS A 255       4.010  22.435   7.393  1.00 18.62           C
ATOM   1750  C   LYS A 255       4.456  22.338   8.862  1.00 18.01           C
ATOM   1751  O   LYS A 255       3.885  22.995   9.717  1.00 16.95           O
ATOM   1752  CB  LYS A 255       2.987  21.333   7.084  1.00 18.90           C
ATOM   1753  CG  LYS A 255       2.148  21.558   5.825  1.00 20.18           C
ATOM   1754  N   CYS A 256       5.470  21.519   9.144  1.00 17.79           N
ATOM   1755  CA  CYS A 256       5.976  21.362  10.508  1.00 18.81           C
ATOM   1756  C   CYS A 256       6.630  22.638  11.057  1.00 19.25           C
ATOM   1757  O   CYS A 256       6.810  22.775  12.270  1.00 19.01           O
ATOM   1758  CB  CYS A 256       6.969  20.195  10.598  1.00 18.67           C
ATOM   1759  SG  CYS A 256       6.260  18.549  10.306  1.00 19.41           S
ATOM   1760  N   TRP A 257       6.981  23.559  10.159  1.00 19.82           N
ATOM   1761  CA  TRP A 257       7.705  24.779  10.516  1.00 20.64           C
ATOM   1762  C   TRP A 257       6.875  26.066  10.373  1.00 21.80           C
ATOM   1763  O   TRP A 257       7.437  27.155  10.237  1.00 22.16           O
ATOM   1764  CB  TRP A 257       8.997  24.909   9.696  1.00 19.37           C
ATOM   1765  CG  TRP A 257       9.918  23.732   9.765  1.00 18.88           C
ATOM   1766  CD1 TRP A 257      10.209  22.974  10.866  1.00 18.24           C
ATOM   1767  NE1 TRP A 257      11.100  21.983  10.536  1.00 18.05           N
ATOM   1768  CE2 TRP A 257      11.399  22.077   9.202  1.00 18.42           C
ATOM   1769  CD2 TRP A 257      10.678  23.174   8.685  1.00 18.49           C
ATOM   1770  CE3 TRP A 257      10.815  23.482   7.323  1.00 18.38           C
ATOM   1771  CZ3 TRP A 257      11.661  22.703   6.537  1.00 18.42           C
ATOM   1772  CH2 TRP A 257      12.370  21.623   7.087  1.00 18.16           C
ATOM   1773  CZ2 TRP A 257      12.251  21.295   8.412  1.00 18.72           C
ATOM   1774  N   MET A 258       5.551  25.944  10.391  1.00 23.26           N
ATOM   1775  CA  MET A 258       4.673  27.118  10.460  1.00 24.83           C
ATOM   1776  C   MET A 258       4.920  27.857  11.768  1.00 25.27           C
ATOM   1777  O   MET A 258       5.149  27.225  12.815  1.00 25.71           O
ATOM   1778  CB  MET A 258       3.200  26.719  10.411  1.00 25.26           C
ATOM   1779  CG  MET A 258       2.860  25.612   9.441  1.00 27.53           C
ATOM   1780  SD  MET A 258       2.500  26.199   7.794  1.00 31.59           S
ATOM   1781  CE  MET A 258       0.844  26.895   8.011  1.00 30.46           C
ATOM   1782  N   ILE A 259       4.880  29.187  11.708  1.00 25.59           N
ATOM   1783  CA  ILE A 259       4.985  30.022  12.906  1.00 25.77           C
ATOM   1784  C   ILE A 259       3.831  29.718  13.858  1.00 25.67           C
ATOM   1785  O   ILE A 259       4.033  29.623  15.060  1.00 26.34           O
ATOM   1786  CB  ILE A 259       4.979  31.533  12.545  1.00 26.09           C
ATOM   1787  CG1 ILE A 259       5.994  31.854  11.439  1.00 26.19           C
ATOM   1788  CD1 ILE A 259       7.412  32.100  11.901  1.00 27.92           C
ATOM   1789  CG2 ILE A 259       5.183  32.391  13.798  1.00 26.48           C
ATOM   1790  N   ASP A 260       2.625  29.581  13.310  1.00 25.91           N
ATOM   1791  CA  ASP A 260       1.438  29.220  14.085  1.00 26.00           C
ATOM   1792  C   ASP A 260       1.470  27.726  14.433  1.00 25.77           C
ATOM   1793  O   ASP A 260       1.267  26.868  13.567  1.00 25.19           O
ATOM   1794  CB  ASP A 260       0.176  29.570  13.288  1.00 26.40           C
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FIG. 5DD

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ATOM   1795  CG  ASP A 260      -1.109  29.266  14.041  1.00 27.75           C
ATOM   1796  OD1 ASP A 260      -1.144  29.388  15.282  1.00 30.06           O
ATOM   1797  OD2 ASP A 260      -2.154  28.909  13.464  1.00 29.15           O
ATOM   1798  N   ALA A 261       1.734  27.431  15.704  1.00 25.81           N
ATOM   1799  CA  ALA A 261       1.924  26.058  16.187  1.00 25.67           C
ATOM   1800  C   ALA A 261       0.717  25.161  15.937  1.00 26.09           C
ATOM   1801  O   ALA A 261       0.865  23.971  15.666  1.00 26.38           O
ATOM   1802  CB  ALA A 261       2.286  26.066  17.665  1.00 25.12           C
ATOM   1803  N   ASP A 262      -0.474  25.746  16.019  1.00 26.76           N
ATOM   1804  CA  ASP A 262      -1.721  25.028  15.794  1.00 27.09           C
ATOM   1805  C   ASP A 262      -1.980  24.677  14.334  1.00 26.53           C
ATOM   1806  O   ASP A 262      -2.850  23.854  14.040  1.00 25.86           O
ATOM   1807  CB  ASP A 262      -2.903  25.837  16.341  1.00 28.40           C
ATOM   1808  CG  ASP A 262      -3.212  25.496  17.780  1.00 29.96           C
ATOM   1809  OD1 ASP A 262      -3.772  24.403  18.031  1.00 31.76           O
ATOM   1810  OD2 ASP A 262      -2.916  26.251  18.724  1.00 31.29           O
ATOM   1811  N   SER A 263      -1.247  25.304  13.417  1.00 25.76           N
ATOM   1812  CA  SER A 263      -1.411  24.967  12.006  1.00 25.84           C
ATOM   1813  C   SER A 263      -0.391  23.924  11.519  1.00 24.48           C
ATOM   1814  O   SER A 263      -0.395  23.545  10.353  1.00 24.57           O
ATOM   1815  CB  SER A 263      -1.425  26.221  11.122  1.00 25.90           C
ATOM   1816  OG  SER A 263      -0.113  26.698  10.925  1.00 29.08           O
ATOM   1817  N   ARG A 264       0.472  23.468  12.424  1.00 23.19           N
ATOM   1818  CA  ARG A 264       1.396  22.378  12.136  1.00 21.98           C
ATOM   1819  C   ARG A 264       0.633  21.051  12.218  1.00 21.72           C
ATOM   1820  O   ARG A 264      -0.353  20.943  12.961  1.00 21.71           O
ATOM   1821  CB  ARG A 264       2.543  22.369  13.147  1.00 21.66           C
ATOM   1822  CG  ARG A 264       3.498  23.553  13.058  1.00 20.71           C
ATOM   1823  CD  ARG A 264       4.437  23.688  14.270  1.00 19.74           C
ATOM   1824  NE  ARG A 264       4.875  25.072  14.446  1.00 19.73           N
ATOM   1825  CZ  ARG A 264       5.352  25.592  15.574  1.00 19.18           C
ATOM   1826  NH1 ARG A 264       5.699  26.871  15.596  1.00 17.68           N
ATOM   1827  NH2 ARG A 264       5.488  24.850  16.674  1.00 16.00           N
ATOM   1828  N   PRO A 265       1.072  20.042  11.468  1.00 21.06           N
ATOM   1829  CA  PRO A 265       0.467  18.705  11.556  1.00 20.80           C
ATOM   1830  C   PRO A 265       0.490  18.155  12.974  1.00 20.48           C
ATOM   1831  O   PRO A 265       1.320  18.563  13.778  1.00 21.30           O
ATOM   1832  CB  PRO A 265       1.379  17.847  10.680  1.00 20.71           C
ATOM   1833  CG  PRO A 265       2.031  18.810   9.737  1.00 21.16           C
ATOM   1834  CD  PRO A 265       2.173  20.093  10.487  1.00 21.05           C
ATOM   1835  N   LYS A 266      -0.424  17.245  13.275  1.00 20.19           N
ATOM   1836  CA  LYS A 266      -0.376  16.493  14.512  1.00 20.12           C
ATOM   1837  C   LYS A 266       0.402  15.225  14.248  1.00 19.65           C
ATOM   1838  O   LYS A 266       0.420  14.734  13.108  1.00 20.28           O
ATOM   1839  CB  LYS A 266      -1.788  16.142  14.987  1.00 20.90           C
ATOM   1840  CG  LYS A 266      -2.651  17.353  15.392  1.00 22.35           C
ATOM   1841  CD  LYS A 266      -2.036  18.159  16.531  1.00 24.13           C
ATOM   1842  CE  LYS A 266      -2.159  17.420  17.871  1.00 25.87           C
ATOM   1843  NZ  LYS A 266      -1.152  17.916  18.880  1.00 27.42           N
ATOM   1844  N   PHE A 267       1.042  14.688  15.283  1.00 18.25           N
ATOM   1845  CA  PHE A 267       1.741  13.410  15.148  1.00 17.73           C
ATOM   1846  C   PHE A 267       0.828  12.287  14.621  1.00 17.91           C
ATOM   1847  O   PHE A 267       1.235  11.539  13.739  1.00 18.09           O
ATOM   1848  CB  PHE A 267       2.474  13.018  16.448  1.00 16.62           C
ATOM   1849  CG  PHE A 267       3.757  13.786  16.675  1.00 14.86           C
ATOM   1850  CD1 PHE A 267       4.807  13.717  15.754  1.00 14.57           C
ATOM   1851  CE1 PHE A 267       5.998  14.424  15.956  1.00 13.52           C
ATOM   1852  CZ  PHE A 267       6.137  15.226  17.097  1.00 13.45           C
ATOM   1853  CE2 PHE A 267       5.092  15.295  18.021  1.00 13.45           C
ATOM   1854  CD2 PHE A 267       3.916  14.581  17.806  1.00 13.41           C
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FIG. 5EE

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ATOM   1855  N   ARG A 268      -0.404  12.196  15.123  1.00 18.54           N
ATOM   1856  CA  ARG A 268      -1.369  11.209  14.618  1.00 19.41           C
ATOM   1857  C   ARG A 268      -1.572  11.333  13.107  1.00 20.26           C
ATOM   1858  O   ARG A 268      -1.692  10.321  12.411  1.00 20.90           O
ATOM   1859  CB  ARG A 268      -2.717  11.319  15.335  1.00 18.84           C
ATOM   1860  N   GLU A 269      -1.597  12.576  12.620  1.00 20.30           N
ATOM   1861  CA  GLU A 269      -1.732  12.878  11.199  1.00 20.68           C
ATOM   1862  C   GLU A 269      -0.485  12.454  10.423  1.00 20.10           C
ATOM   1863  O   GLU A 269      -0.593  11.797   9.390  1.00 20.32           O
ATOM   1864  CB  GLU A 269      -2.010  14.373  10.988  1.00 20.61           C
ATOM   1865  CG  GLU A 269      -3.489  14.737  10.996  1.00 23.22           C
ATOM   1866  CD  GLU A 269      -3.814  16.047  11.720  1.00 26.05           C
ATOM   1867  OE1 GLU A 269      -3.074  17.057  11.576  1.00 24.55           O
ATOM   1868  OE2 GLU A 269      -4.852  16.072  12.430  1.00 27.97           O
ATOM   1869  N   LEU A 270       0.691  12.825  10.936  1.00 19.58           N
ATOM   1870  CA  LEU A 270       1.980  12.437  10.350  1.00 18.51           C
ATOM   1871  C   LEU A 270       2.174  10.910  10.284  1.00 18.07           C
ATOM   1872  O   LEU A 270       2.736  10.387   9.309  1.00 17.45           O
ATOM   1873  CB  LEU A 270       3.143  13.090  11.107  1.00 18.03           C
ATOM   1874  CG  LEU A 270       3.213  14.623  11.076  1.00 18.05           C
ATOM   1875  CD1 LEU A 270       4.173  15.150  12.143  1.00 17.10           C
ATOM   1876  CD2 LEU A 270       3.627  15.121   9.698  1.00 16.86           C
ATOM   1877  N   ILE A 271       1.709  10.201  11.310  1.00 17.28           N
ATOM   1878  CA  ILE A 271       1.689   8.741  11.247  1.00 17.15           C
ATOM   1879  C   ILE A 271       0.950   8.304   9.981  1.00 17.61           C
ATOM   1880  O   ILE A 271       1.530   7.618   9.146  1.00 18.33           O
ATOM   1881  CB  ILE A 271       1.048   8.110  12.502  1.00 16.19           C
ATOM   1882  CG1 ILE A 271       1.932   8.323  13.735  1.00 15.11           C
ATOM   1883  CD1 ILE A 271       1.247   7.991  15.067  1.00 14.36           C
ATOM   1884  CG2 ILE A 271       0.805   6.627  12.279  1.00 15.98           C
ATOM   1885  N   ILE A 272      -0.303   8.738   9.830  1.00 17.87           N
ATOM   1886  CA  ILE A 272      -1.154   8.344   8.700  1.00 18.15           C
ATOM   1887  C   ILE A 272      -0.525   8.716   7.355  1.00 18.72           C
ATOM   1888  O   ILE A 272      -0.428   7.872   6.455  1.00 18.78           O
ATOM   1889  CB  ILE A 272      -2.581   8.980   8.837  1.00 18.38           C
ATOM   1890  CG1 ILE A 272      -3.384   8.283   9.938  1.00 17.29           C
ATOM   1891  CD1 ILE A 272      -4.382   9.213  10.642  1.00 17.41           C
ATOM   1892  CG2 ILE A 272      -3.352   8.972   7.488  1.00 17.05           C
ATOM   1893  N   GLU A 273      -0.085   9.970   7.244  1.00 19.24           N
ATOM   1894  CA  GLU A 273       0.481  10.511   6.007  1.00 19.84           C
ATOM   1895  C   GLU A 273       1.727   9.768   5.547  1.00 20.65           C
ATOM   1896  O   GLU A 273       1.804   9.342   4.395  1.00 21.30           O
ATOM   1897  CB  GLU A 273       0.799  11.999   6.166  1.00 19.57           C
ATOM   1898  N   PHE A 274       2.701   9.621   6.448  1.00 20.98           N
ATOM   1899  CA  PHE A 274       3.950   8.946   6.125  1.00 21.08           C
ATOM   1900  C   PHE A 274       3.741   7.445   5.886  1.00 21.17           C
ATOM   1901  O   PHE A 274       4.391   6.854   5.023  1.00 20.52           O
ATOM   1902  CB  PHE A 274       5.008   9.207   7.204  1.00 21.30           C
ATOM   1903  CG  PHE A 274       5.849  10.425   6.941  1.00 21.25           C
ATOM   1904  CD1 PHE A 274       6.830  10.409   5.953  1.00 22.11           C
ATOM   1905  CE1 PHE A 274       7.614  11.549   5.702  1.00 22.74           C
ATOM   1906  CZ  PHE A 274       7.414  12.713   6.455  1.00 21.83           C
ATOM   1907  CE2 PHE A 274       6.433  12.731   7.443  1.00 22.09           C
ATOM   1908  CD2 PHE A 274       5.660  11.591   7.680  1.00 21.68           C
ATOM   1909  N   SER A 275       2.819   6.840   6.634  1.00 21.59           N
ATOM   1910  CA  SER A 275       2.429   5.452   6.383  1.00 22.53           C
ATOM   1911  C   SER A 275       1.900   5.240   4.960  1.00 23.05           C
ATOM   1912  O   SER A 275       2.218   4.238   4.324  1.00 22.60           O
ATOM   1913  CB  SER A 275       1.398   4.983   7.399  1.00 22.33           C
ATOM   1914  OG  SER A 275       1.943   5.020   8.701  1.00 23.66           O
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FIG. 5FF

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ATOM   1915  N   LYS A 276       1.107   6.188   4.462  1.00 24.02           N
ATOM   1916  CA  LYS A 276       0.613   6.119   3.087  1.00 25.17           C
ATOM   1917  C   LYS A 276       1.784   6.110   2.101  1.00 25.09           C
ATOM   1918  O   LYS A 276       1.780   5.346   1.134  1.00 25.11           O
ATOM   1919  CB  LYS A 276      -0.336   7.284   2.792  1.00 25.75           C
ATOM   1920  CG  LYS A 276      -0.946   7.283   1.386  1.00 27.13           C
ATOM   1921  CD  LYS A 276      -0.582   8.558   0.621  1.00 29.40           C
ATOM   1922  CE  LYS A 276      -1.405   9.754   1.092  1.00 30.40           C
ATOM   1923  NZ  LYS A 276      -0.533  10.932   1.363  1.00 31.80           N
ATOM   1924  N   MET A 277       2.781   6.951   2.373  1.00 25.24           N
ATOM   1925  CA  MET A 277       3.975   7.070   1.534  1.00 25.11           C
ATOM   1926  C   MET A 277       4.883   5.849   1.642  1.00 25.40           C
ATOM   1927  O   MET A 277       5.548   5.474   0.667  1.00 25.24           O
ATOM   1928  CB  MET A 277       4.771   8.333   1.879  1.00 24.94           C
ATOM   1929  CG  MET A 277       3.996   9.631   1.753  1.00 24.31           C
ATOM   1930  SD  MET A 277       5.040  11.099   2.009  1.00 25.21           S
ATOM   1931  CE  MET A 277       4.133  12.291   1.083  1.00 25.13           C
ATOM   1932  N   ALA A 278       4.910   5.239   2.829  1.00 25.57           N
ATOM   1933  CA  ALA A 278       5.694   4.033   3.067  1.00 25.99           C
ATOM   1934  C   ALA A 278       5.179   2.838   2.265  1.00 26.79           C
ATOM   1935  O   ALA A 278       5.951   1.934   1.947  1.00 26.85           O
ATOM   1936  CB  ALA A 278       5.742   3.706   4.545  1.00 25.47           C
ATOM   1937  N   ARG A 279       3.884   2.843   1.941  1.00 27.59           N
ATOM   1938  CA  ARG A 279       3.272   1.799   1.111  1.00 28.44           C
ATOM   1939  C   ARG A 279       3.629   1.943  -0.368  1.00 28.80           C
ATOM   1940  O   ARG A 279       3.400   1.019  -1.153  1.00 29.24           O
ATOM   1941  CB  ARG A 279       1.746   1.769   1.272  1.00 28.76           C
ATOM   1942  CG  ARG A 279       1.252   1.473   2.687  1.00 29.96           C
ATOM   1943  CD  ARG A 279      -0.248   1.207   2.804  1.00 31.28           C
ATOM   1944  NE  ARG A 279      -1.066   2.265   2.211  1.00 34.42           N
ATOM   1945  CZ  ARG A 279      -1.756   3.187   2.898  1.00 35.78           C
ATOM   1946  NH1 ARG A 279      -1.732   3.212   4.226  1.00 34.45           N
ATOM   1947  NH2 ARG A 279      -2.475   4.096   2.242  1.00 36.50           N
ATOM   1948  N   ASP A 280       4.182   3.099  -0.739  1.00 29.28           N
ATOM   1949  CA  ASP A 280       4.622   3.365  -2.114  1.00 29.54           C
ATOM   1950  C   ASP A 280       5.878   4.253  -2.119  1.00 29.35           C
ATOM   1951  O   ASP A 280       5.847   5.391  -2.592  1.00 29.52           O
ATOM   1952  CB  ASP A 280       3.481   4.016  -2.907  1.00 29.96           C
ATOM   1953  CG  ASP A 280       3.700   3.981  -4.416  1.00 30.61           C
ATOM   1954  OD1 ASP A 280       4.746   3.480  -4.894  1.00 30.49           O
ATOM   1955  OD2 ASP A 280       2.856   4.450  -5.207  1.00 32.11           O
ATOM   1956  N   PRO A 281       6.989   3.711  -1.617  1.00 29.24           N
ATOM   1957  CA  PRO A 281       8.175   4.509  -1.297  1.00 29.16           C
ATOM   1958  C   PRO A 281       8.817   5.190  -2.492  1.00 29.07           C
ATOM   1959  O   PRO A 281       9.286   6.323  -2.366  1.00 28.00           O
ATOM   1960  CB  PRO A 281       9.148   3.477  -0.716  1.00 29.37           C
ATOM   1961  CG  PRO A 281       8.337   2.280  -0.416  1.00 29.42           C
ATOM   1962  CD  PRO A 281       7.204   2.279  -1.354  1.00 29.24           C
ATOM   1963  N   GLN A 282       8.843   4.493  -3.625  1.00 29.78           N
ATOM   1964  CA  GLN A 282       9.511   4.974  -4.834  1.00 29.92           C
ATOM   1965  C   GLN A 282       8.811   6.179  -5.466  1.00 29.29           C
ATOM   1966  O   GLN A 282       9.434   6.936  -6.197  1.00 28.92           O
ATOM   1967  CB  GLN A 282       9.659   3.837  -5.849  1.00 30.56           C
ATOM   1968  CG  GLN A 282      11.059   3.235  -5.900  1.00 31.99           C
ATOM   1969  CD  GLN A 282      11.053   1.715  -6.003  1.00 34.14           C
ATOM   1970  OE1 GLN A 282      11.116   1.164  -7.102  1.00 35.63           O
ATOM   1971  NE2 GLN A 282      10.987   1.036  -4.860  1.00 34.80           N
ATOM   1972  N   ARG A 283       7.525   6.356  -5.168  1.00 29.25           N
ATOM   1973  CA  ARG A 283       6.763   7.507  -5.662  1.00 29.58           C
ATOM   1974  C   ARG A 283       7.077   8.807  -4.909  1.00 28.96           C
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FIG. 5GG

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ATOM   1975  O   ARG A 283       7.076   9.881  -5.509  1.00 29.15           O
ATOM   1976  CB  ARG A 283       5.258   7.230  -5.606  1.00 29.98           C
ATOM   1977  CG  ARG A 283       4.430   8.195  -6.444  1.00 32.26           C
ATOM   1978  CD  ARG A 283       3.384   8.975  -5.660  1.00 34.13           C
ATOM   1979  NE  ARG A 283       3.796  10.356  -5.409  1.00 35.93           N
ATOM   1980  CZ  ARG A 283       2.967  11.396  -5.359  1.00 36.56           C
ATOM   1981  NH1 ARG A 283       1.670  11.239  -5.556  1.00 36.76           N
ATOM   1982  NH2 ARG A 283       3.437  12.607  -5.106  1.00 37.04           N
ATOM   1983  N   TYR A 284       7.344   8.702  -3.606  1.00 27.79           N
ATOM   1984  CA  TYR A 284       7.514   9.875  -2.749  1.00 27.02           C
ATOM   1985  C   TYR A 284       8.971  10.266  -2.482  1.00 26.98           C
ATOM   1986  O   TYR A 284       9.260  11.419  -2.142  1.00 26.11           O
ATOM   1987  CB  TYR A 284       6.758   9.671  -1.440  1.00 26.57           C
ATOM   1988  CG  TYR A 284       5.270   9.556  -1.656  1.00 25.92           C
ATOM   1989  CD1 TYR A 284       4.636   8.310  -1.667  1.00 24.81           C
ATOM   1990  CE1 TYR A 284       3.262   8.215  -1.884  1.00 25.01           C
ATOM   1991  CZ  TYR A 284       2.520   9.372  -2.101  1.00 24.76           C
ATOM   1992  OH  TYR A 284       1.159   9.308  -2.310  1.00 25.67           O
ATOM   1993  CE2 TYR A 284       3.133  10.603  -2.099  1.00 24.30           C
ATOM   1994  CD2 TYR A 284       4.498  10.691  -1.886  1.00 24.65           C
ATOM   1995  N   LEU A 285       9.876   9.302  -2.628  1.00 26.74           N
ATOM   1996  CA  LEU A 285      11.307   9.567  -2.515  1.00 27.31           C
ATOM   1997  C   LEU A 285      12.023   9.088  -3.774  1.00 27.61           C
ATOM   1998  O   LEU A 285      11.777   7.976  -4.250  1.00 27.39           O
ATOM   1999  CB  LEU A 285      11.892   8.893  -1.270  1.00 26.80           C
ATOM   2000  CG  LEU A 285      11.533   9.451   0.113  1.00 26.75           C
ATOM   2001  CD1 LEU A 285      12.421   8.819   1.176  1.00 26.78           C
ATOM   2002  CD2 LEU A 285      11.627  10.978   0.181  1.00 25.02           C
ATOM   2003  N   VAL A 286      12.896   9.934  -4.310  1.00 28.04           N
ATOM   2004  CA  VAL A 286      13.595   9.620  -5.549  1.00 29.26           C
ATOM   2005  C   VAL A 286      15.069   9.306  -5.299  1.00 30.07           C
ATOM   2006  O   VAL A 286      15.892  10.204  -5.082  1.00 30.22           O
ATOM   2007  CB  VAL A 286      13.420  10.736  -6.613  1.00 29.27           C
ATOM   2008  CG1 VAL A 286      14.239  10.434  -7.857  1.00 28.88           C
ATOM   2009  CG2 VAL A 286      11.951  10.894  -6.976  1.00 29.23           C
ATOM   2010  N   ILE A 287      15.384   8.016  -5.325  1.00 30.87           N
ATOM   2011  CA  ILE A 287      16.755   7.548  -5.133  1.00 31.43           C
ATOM   2012  C   ILE A 287      17.191   6.719  -6.343  1.00 31.78           C
ATOM   2013  O   ILE A 287      16.435   5.870  -6.823  1.00 31.94           O
ATOM   2014  CB  ILE A 287      16.884   6.749  -3.807  1.00 31.42           C
ATOM   2015  CG1 ILE A 287      16.253   7.541  -2.649  1.00 30.94           C
ATOM   2016  CD1 ILE A 287      16.107   6.775  -1.365  1.00 29.79           C
ATOM   2017  CG2 ILE A 287      18.353   6.431  -3.505  1.00 31.01           C
ATOM   2018  N   GLN A 288      18.408   6.983  -6.819  1.00 32.08           N
ATOM   2019  CA  GLN A 288      18.957   6.392  -8.051  1.00 32.44           C
ATOM   2020  C   GLN A 288      18.962   4.859  -8.093  1.00 32.12           C
ATOM   2021  O   GLN A 288      19.237   4.188  -7.097  1.00 32.37           O
ATOM   2022  CB  GLN A 288      20.373   6.931  -8.316  1.00 31.90           C
TER    2023      GLN A 288
ATOM   2024  N   LEU B   9      35.809  -0.280  55.500  1.00 36.51           N
ATOM   2025  CA  LEU B   9      35.250  -0.239  54.114  1.00 36.16           C
ATOM   2026  C   LEU B   9      33.732  -0.044  54.098  1.00 36.07           C
ATOM   2027  O   LEU B   9      33.007  -0.581  54.941  1.00 35.35           O
ATOM   2028  CB  LEU B   9      35.628  -1.501  53.337  1.00 36.62           C
ATOM   2029  N   LEU B  10      33.273   0.715  53.107  1.00 36.08           N
ATOM   2030  CA  LEU B  10      31.879   1.117  52.984  1.00 35.93           C
ATOM   2031  C   LEU B  10      31.140   0.283  51.947  1.00 36.33           C
ATOM   2032  O   LEU B  10      31.656   0.005  50.864  1.00 36.38           O
ATOM   2033  CB  LEU B  10      31.811   2.599  52.609  1.00 35.82           C
ATOM   2034  CG  LEU B  10      30.467   3.253  52.289  1.00 35.50           C
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FIG. 5HH

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ATOM   2035  CD1 LEU B  10      29.675   3.532  53.564  1.00 35.76           C
ATOM   2036  CD2 LEU B  10      30.701   4.528  51.499  1.00 34.70           C
ATOM   2037  N   ARG B  11      29.919  -0.108  52.287  1.00 36.51           N
ATOM   2038  CA  ARG B  11      29.059  -0.811  51.351  1.00 36.75           C
ATOM   2039  C   ARG B  11      27.953   0.131  50.896  1.00 36.14           C
ATOM   2040  O   ARG B  11      27.163   0.603  51.708  1.00 36.07           O
ATOM   2041  CB  ARG B  11      28.467  -2.073  51.992  1.00 37.08           C
ATOM   2042  CG  ARG B  11      29.452  -2.903  52.795  1.00 38.59           C
ATOM   2043  CD  ARG B  11      28.870  -4.190  53.348  1.00 41.84           C
ATOM   2044  NE  ARG B  11      29.877  -5.244  53.464  1.00 44.46           N
ATOM   2045  CZ  ARG B  11      29.658  -6.537  53.223  1.00 46.07           C
ATOM   2046  NH1 ARG B  11      28.456  -6.961  52.843  1.00 46.10           N
ATOM   2047  NH2 ARG B  11      30.649  -7.412  53.360  1.00 46.50           N
ATOM   2048  N   ILE B  12      27.922   0.430  49.602  1.00 35.95           N
ATOM   2049  CA  ILE B  12      26.826   1.201  49.036  1.00 35.61           C
ATOM   2050  C   ILE B  12      25.685   0.231  48.791  1.00 35.35           C
ATOM   2051  O   ILE B  12      25.714  -0.538  47.836  1.00 36.12           O
ATOM   2052  CB  ILE B  12      27.246   1.940  47.743  1.00 35.75           C
ATOM   2053  CG1 ILE B  12      28.487   2.803  47.995  1.00 36.13           C
ATOM   2054  CD1 ILE B  12      29.037   3.479  46.741  1.00 38.25           C
ATOM   2055  CG2 ILE B  12      26.094   2.809  47.223  1.00 35.27           C
ATOM   2056  N   LEU B  13      24.692   0.278  49.677  1.00 34.69           N
ATOM   2057  CA  LEU B  13      23.610  -0.701  49.741  1.00 33.89           C
ATOM   2058  C   LEU B  13      22.453  -0.394  48.790  1.00 33.60           C
ATOM   2059  O   LEU B  13      22.276   0.743  48.354  1.00 33.47           O
ATOM   2060  CB  LEU B  13      23.077  -0.775  51.179  1.00 33.85           C
ATOM   2061  CG  LEU B  13      23.550  -1.878  52.134  1.00 33.47           C
ATOM   2062  CD1 LEU B  13      25.057  -1.965  52.215  1.00 31.89           C
ATOM   2063  CD2 LEU B  13      22.967  -1.656  53.522  1.00 32.68           C
ATOM   2064  N   LYS B  14      21.668  -1.427  48.497  1.00 33.25           N
ATOM   2065  CA  LYS B  14      20.450  -1.323  47.696  1.00 32.95           C
ATOM   2066  C   LYS B  14      19.238  -1.477  48.624  1.00 32.91           C
ATOM   2067  O   LYS B  14      19.256  -2.299  49.545  1.00 32.35           O
ATOM   2068  CB  LYS B  14      20.464  -2.429  46.639  1.00 33.21           C
ATOM   2069  CG  LYS B  14      19.397  -2.350  45.580  1.00 32.70           C
ATOM   2070  CD  LYS B  14      19.748  -3.275  44.422  1.00 33.95           C
ATOM   2071  CE  LYS B  14      18.985  -4.589  44.473  1.00 33.74           C
ATOM   2072  NZ  LYS B  14      18.828  -5.165  43.115  1.00 34.37           N
ATOM   2073  N   GLU B  15      18.181  -0.702  48.373  1.00 32.75           N
ATOM   2074  CA  GLU B  15      17.049  -0.613  49.310  1.00 32.78           C
ATOM   2075  C   GLU B  15      16.366  -1.930  49.675  1.00 32.45           C
ATOM   2076  O   GLU B  15      15.819  -2.058  50.766  1.00 32.62           O
ATOM   2077  CB  GLU B  15      16.016   0.424  48.852  1.00 32.78           C
ATOM   2078  CG  GLU B  15      15.217   0.045  47.614  1.00 33.77           C
ATOM   2079  CD  GLU B  15      14.304   1.162  47.147  1.00 34.04           C
ATOM   2080  OE1 GLU B  15      14.271   2.215  47.812  1.00 34.14           O
ATOM   2081  OE2 GLU B  15      13.615   0.983  46.117  1.00 35.01           O
ATOM   2082  N   THR B  16      16.412  -2.906  48.775  1.00 32.21           N
ATOM   2083  CA  THR B  16      15.783  -4.206  49.009  1.00 32.16           C
ATOM   2084  C   THR B  16      16.674  -5.170  49.805  1.00 32.09           C
ATOM   2085  O   THR B  16      16.320  -6.336  49.997  1.00 32.44           O
ATOM   2086  CB  THR B  16      15.371  -4.852  47.667  1.00 32.32           C
ATOM   2087  OG1 THR B  16      16.395  -4.622  46.688  1.00 32.60           O
ATOM   2088  CG2 THR B  16      14.151  -4.147  47.078  1.00 31.88           C
ATOM   2089  N   GLU B  17      17.824  -4.687  50.265  1.00 31.84           N
ATOM   2090  CA  GLU B  17      18.741  -5.514  51.047  1.00 32.14           C
ATOM   2091  C   GLU B  17      18.494  -5.362  52.550  1.00 31.88           C
ATOM   2092  O   GLU B  17      18.961  -6.177  53.346  1.00 31.76           O
ATOM   2093  CB  GLU B  17      20.198  -5.193  50.702  1.00 32.22           C
ATOM   2094  CG  GLU B  17      20.569  -5.477  49.256  1.00 33.17           C
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FIG. 5II

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ATOM   2095  CD  GLU B  17      22.047  -5.273  48.975  1.00 35.12           C
ATOM   2096  OE1 GLU B  17      22.477  -4.110  48.802  1.00 34.59           O
ATOM   2097  OE2 GLU B  17      22.783  -6.282  48.917  1.00 36.62           O
ATOM   2098  N   PHE B  18      17.753  -4.321  52.928  1.00 31.36           N
ATOM   2099  CA  PHE B  18      17.422  -4.080  54.329  1.00 31.02           C
ATOM   2100  C   PHE B  18      15.933  -3.776  54.548  1.00 31.04           C
ATOM   2101  O   PHE B  18      15.230  -3.359  53.627  1.00 30.91           O
ATOM   2102  CB  PHE B  18      18.319  -2.982  54.935  1.00 30.55           C
ATOM   2103  CG  PHE B  18      18.177  -1.626  54.280  1.00 29.89           C
ATOM   2104  CD1 PHE B  18      17.259  -0.698  54.760  1.00 29.27           C
ATOM   2105  CE1 PHE B  18      17.130   0.558  54.166  1.00 28.49           C
ATOM   2106  CZ  PHE B  18      17.925   0.897  53.082  1.00 28.29           C
ATOM   2107  CE2 PHE B  18      18.850  -0.019  52.590  1.00 28.52           C
ATOM   2108  CD2 PHE B  18      18.982  -1.269  53.196  1.00 29.36           C
ATOM   2109  N   LYS B  19      15.470  -3.987  55.777  1.00 30.75           N
ATOM   2110  CA  LYS B  19      14.080  -3.743  56.135  1.00 30.90           C
ATOM   2111  C   LYS B  19      13.947  -3.119  57.522  1.00 30.85           C
ATOM   2112  O   LYS B  19      14.409  -3.687  58.513  1.00 30.82           O
ATOM   2113  CB  LYS B  19      13.272  -5.046  56.077  1.00 30.67           C
ATOM   2114  N   LYS B  20      13.304  -1.956  57.575  1.00 30.91           N
ATOM   2115  CA  LYS B  20      12.921  -1.325  58.835  1.00 31.54           C
ATOM   2116  C   LYS B  20      11.773  -2.098  59.468  1.00 31.91           C
ATOM   2117  O   LYS B  20      10.773  -2.394  58.804  1.00 32.29           O
ATOM   2118  CB  LYS B  20      12.471   0.121  58.608  1.00 31.68           C
ATOM   2119  CG  LYS B  20      13.489   1.027  57.960  1.00 32.01           C
ATOM   2120  CD  LYS B  20      12.827   2.338  57.566  1.00 33.94           C
ATOM   2121  CE  LYS B  20      13.007   2.631  56.091  1.00 35.02           C
ATOM   2122  NZ  LYS B  20      13.598   3.988  55.903  1.00 36.81           N
ATOM   2123  N   ILE B  21      11.913  -2.411  60.752  1.00 32.24           N
ATOM   2124  CA  ILE B  21      10.881  -3.133  61.484  1.00 32.61           C
ATOM   2125  C   ILE B  21      10.252  -2.287  62.606  1.00 33.07           C
ATOM   2126  O   ILE B  21       9.038  -2.302  62.780  1.00 33.91           O
ATOM   2127  CB  ILE B  21      11.421  -4.513  61.982  1.00 32.64           C
ATOM   2128  CG1 ILE B  21      11.042  -5.615  60.991  1.00 32.36           C
ATOM   2129  CD1 ILE B  21      12.190  -6.499  60.574  1.00 32.32           C
ATOM   2130  CG2 ILE B  21      10.888  -4.874  63.362  1.00 32.84           C
ATOM   2131  N   LYS B  22      11.064  -1.538  63.348  1.00 33.18           N
ATOM   2132  CA  LYS B  22      10.540  -0.695  64.426  1.00 33.02           C
ATOM   2133  C   LYS B  22      11.362   0.580  64.645  1.00 32.45           C
ATOM   2134  O   LYS B  22      12.582   0.582  64.466  1.00 32.37           O
ATOM   2135  CB  LYS B  22      10.378  -1.511  65.722  1.00 33.28           C
ATOM   2136  CG  LYS B  22      11.252  -1.096  66.895  1.00 34.72           C
ATOM   2137  CD  LYS B  22      10.965  -1.947  68.134  1.00 36.26           C
ATOM   2138  CE  LYS B  22      10.344  -1.116  69.265  1.00 37.38           C
ATOM   2139  NZ  LYS B  22      11.158   0.095  69.624  1.00 37.93           N
ATOM   2140  N   VAL B  23      10.672   1.658  65.016  1.00 31.81           N
ATOM   2141  CA  VAL B  23      11.295   2.947  65.312  1.00 31.31           C
ATOM   2142  C   VAL B  23      11.936   2.915  66.701  1.00 31.22           C
ATOM   2143  O   VAL B  23      11.312   2.471  67.669  1.00 31.50           O
ATOM   2144  CB  VAL B  23      10.263   4.112  65.231  1.00 31.66           C
ATOM   2145  CG1 VAL B  23      10.937   5.466  65.411  1.00 30.71           C
ATOM   2146  CG2 VAL B  23       9.520   4.082  63.910  1.00 30.77           C
ATOM   2147  N   LEU B  24      13.183   3.374  66.786  1.00 30.78           N
ATOM   2148  CA  LEU B  24      13.927   3.382  68.043  1.00 30.60           C
ATOM   2149  C   LEU B  24      14.085   4.781  68.614  1.00 30.65           C
ATOM   2150  O   LEU B  24      14.251   4.946  69.822  1.00 30.68           O
ATOM   2151  CB  LEU B  24      15.315   2.764  67.863  1.00 30.72           C
ATOM   2152  CG  LEU B  24      15.442   1.295  67.475  1.00 30.42           C
ATOM   2153  CD1 LEU B  24      16.908   0.921  67.455  1.00 29.08           C
ATOM   2154  CD2 LEU B  24      14.646   0.377  68.422  1.00 31.11           C
```

FIG. 5JJ

```
ATOM   2155  N   GLY B  25      14.044   5.784  67.746  1.00 30.59           N
ATOM   2156  CA  GLY B  25      14.208   7.155  68.179  1.00 31.08           C
ATOM   2157  C   GLY B  25      14.509   8.120  67.054  1.00 31.75           C
ATOM   2158  O   GLY B  25      14.409   7.777  65.869  1.00 31.24           O
ATOM   2159  N   SER B  26      14.876   9.337  67.444  1.00 32.16           N
ATOM   2160  CA  SER B  26      15.187  10.412  66.511  1.00 33.09           C
ATOM   2161  C   SER B  26      16.125  11.447  67.141  1.00 33.40           C
ATOM   2162  O   SER B  26      16.416  11.392  68.336  1.00 33.11           O
ATOM   2163  CB  SER B  26      13.902  11.095  66.036  1.00 32.88           C
ATOM   2164  OG  SER B  26      13.078  11.437  67.135  1.00 33.34           O
ATOM   2165  N   GLY B  27      16.594  12.377  66.315  1.00 33.88           N
ATOM   2166  CA  GLY B  27      17.429  13.480  66.748  1.00 34.41           C
ATOM   2167  C   GLY B  27      17.428  14.573  65.696  1.00 35.04           C
ATOM   2168  O   GLY B  27      16.602  14.571  64.780  1.00 35.00           O
ATOM   2169  N   ALA B  28      18.362  15.510  65.825  1.00 35.78           N
ATOM   2170  CA  ALA B  28      18.546  16.561  64.827  1.00 36.05           C
ATOM   2171  C   ALA B  28      18.841  16.000  63.436  1.00 36.09           C
ATOM   2172  O   ALA B  28      18.481  16.621  62.436  1.00 36.99           O
ATOM   2173  CB  ALA B  28      19.645  17.526  65.259  1.00 36.12           C
ATOM   2174  N   PHE B  29      19.471  14.826  63.369  1.00 35.99           N
ATOM   2175  CA  PHE B  29      19.887  14.256  62.079  1.00 35.68           C
ATOM   2176  C   PHE B  29      18.854  13.371  61.380  1.00 34.69           C
ATOM   2177  O   PHE B  29      18.897  13.216  60.163  1.00 34.81           O
ATOM   2178  CB  PHE B  29      21.238  13.551  62.199  1.00 36.19           C
ATOM   2179  CG  PHE B  29      22.347  14.451  62.678  1.00 38.34           C
ATOM   2180  CD1 PHE B  29      22.659  15.627  61.993  1.00 39.30           C
ATOM   2181  CE1 PHE B  29      23.676  16.456  62.431  1.00 39.60           C
ATOM   2182  CZ  PHE B  29      24.398  16.122  63.573  1.00 40.23           C
ATOM   2183  CE2 PHE B  29      24.099  14.955  64.269  1.00 39.74           C
ATOM   2184  CD2 PHE B  29      23.073  14.130  63.821  1.00 39.17           C
ATOM   2185  N   GLY B  30      17.937  12.784  62.143  1.00 33.88           N
ATOM   2186  CA  GLY B  30      16.847  12.017  61.567  1.00 32.69           C
ATOM   2187  C   GLY B  30      16.368  10.866  62.425  1.00 31.96           C
ATOM   2188  O   GLY B  30      16.805  10.697  63.563  1.00 33.12           O
ATOM   2189  N   THR B  31      15.467  10.067  61.867  1.00 30.52           N
ATOM   2190  CA  THR B  31      14.843   8.956  62.578  1.00 28.81           C
ATOM   2191  C   THR B  31      15.733   7.716  62.564  1.00 28.63           C
ATOM   2192  O   THR B  31      16.400   7.430  61.568  1.00 28.17           O
ATOM   2193  CB  THR B  31      13.462   8.632  61.939  1.00 28.33           C
ATOM   2194  OG1 THR B  31      12.636   9.799  61.982  1.00 26.97           O
ATOM   2195  CG2 THR B  31      12.678   7.624  62.777  1.00 26.74           C
ATOM   2196  N   VAL B  32      15.723   6.984  63.677  1.00 28.10           N
ATOM   2197  CA  VAL B  32      16.490   5.753  63.805  1.00 27.94           C
ATOM   2198  C   VAL B  32      15.573   4.532  63.955  1.00 27.59           C
ATOM   2199  O   VAL B  32      14.689   4.514  64.815  1.00 27.23           O
ATOM   2200  CB  VAL B  32      17.477   5.808  64.995  1.00 27.56           C
ATOM   2201  CG1 VAL B  32      18.536   4.730  64.845  1.00 27.73           C
ATOM   2202  CG2 VAL B  32      18.123   7.182  65.106  1.00 28.46           C
ATOM   2203  N   TYR B  33      15.813   3.515  63.126  1.00 26.88           N
ATOM   2204  CA  TYR B  33      15.003   2.299  63.109  1.00 26.99           C
ATOM   2205  C   TYR B  33      15.814   1.074  63.494  1.00 27.45           C
ATOM   2206  O   TYR B  33      17.009   0.988  63.196  1.00 27.54           O
ATOM   2207  CB  TYR B  33      14.430   2.043  61.711  1.00 26.40           C
ATOM   2208  CG  TYR B  33      13.471   3.082  61.204  1.00 25.33           C
ATOM   2209  CD1 TYR B  33      12.089   2.879  61.286  1.00 24.58           C
ATOM   2210  CE1 TYR B  33      11.201   3.829  60.813  1.00 23.85           C
ATOM   2211  CZ  TYR B  33      11.687   4.992  60.242  1.00 23.71           C
ATOM   2212  OH  TYR B  33      10.811   5.926  59.777  1.00 25.43           O
ATOM   2213  CE2 TYR B  33      13.046   5.221  60.134  1.00 23.94           C
ATOM   2214  CD2 TYR B  33      13.936   4.262  60.616  1.00 24.69           C
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FIG. 5KK

```
ATOM   2215  N   LYS B  34      15.154   0.130  64.155  1.00 27.60           N
ATOM   2216  CA  LYS B  34      15.668  -1.224  64.241  1.00 28.46           C
ATOM   2217  C   LYS B  34      15.188  -1.958  62.994  1.00 28.86           C
ATOM   2218  O   LYS B  34      14.002  -1.898  62.628  1.00 29.23           O
ATOM   2219  CB  LYS B  34      15.212  -1.923  65.528  1.00 28.56           C
ATOM   2220  CG  LYS B  34      14.487  -3.259  65.338  1.00 29.67           C
ATOM   2221  CD  LYS B  34      15.401  -4.453  65.615  1.00 30.39           C
ATOM   2222  CE  LYS B  34      15.319  -4.864  67.081  1.00 30.86           C
ATOM   2223  NZ  LYS B  34      15.267  -6.344  67.236  1.00 31.69           N
ATOM   2224  N   GLY B  35      16.121  -2.625  62.330  1.00 28.88           N
ATOM   2225  CA  GLY B  35      15.803  -3.350  61.120  1.00 29.29           C
ATOM   2226  C   GLY B  35      16.651  -4.580  60.893  1.00 29.43           C
ATOM   2227  O   GLY B  35      17.472  -4.963  61.738  1.00 28.80           O
ATOM   2228  N   LEU B  36      16.434  -5.202  59.738  1.00 29.90           N
ATOM   2229  CA  LEU B  36      17.175  -6.393  59.346  1.00 30.45           C
ATOM   2230  C   LEU B  36      17.904  -6.144  58.037  1.00 31.07           C
ATOM   2231  O   LEU B  36      17.440  -5.373  57.200  1.00 31.12           O
ATOM   2232  CB  LEU B  36      16.235  -7.594  59.217  1.00 30.34           C
ATOM   2233  CG  LEU B  36      15.604  -8.171  60.494  1.00 30.19           C
ATOM   2234  CD1 LEU B  36      14.686  -9.355  60.158  1.00 29.69           C
ATOM   2235  CD2 LEU B  36      16.664  -8.589  61.508  1.00 29.41           C
ATOM   2236  N   TRP B  37      19.051  -6.796  57.876  1.00 32.05           N
ATOM   2237  CA  TRP B  37      19.906  -6.622  56.706  1.00 32.98           C
ATOM   2238  C   TRP B  37      20.497  -7.963  56.241  1.00 33.39           C
ATOM   2239  O   TRP B  37      21.000  -8.745  57.053  1.00 32.84           O
ATOM   2240  CB  TRP B  37      21.021  -5.619  57.033  1.00 33.12           C
ATOM   2241  CG  TRP B  37      22.147  -5.537  56.037  1.00 34.77           C
ATOM   2242  CD1 TRP B  37      22.048  -5.546  54.670  1.00 35.24           C
ATOM   2243  NE1 TRP B  37      23.295  -5.441  54.104  1.00 36.21           N
ATOM   2244  CE2 TRP B  37      24.234  -5.357  55.099  1.00 36.82           C
ATOM   2245  CD2 TRP B  37      23.545  -5.410  56.333  1.00 36.13           C
ATOM   2246  CE3 TRP B  37      24.290  -5.333  57.522  1.00 36.03           C
ATOM   2247  CZ3 TRP B  37      25.675  -5.213  57.443  1.00 37.00           C
ATOM   2248  CH2 TRP B  37      26.331  -5.163  56.198  1.00 37.38           C
ATOM   2249  CZ2 TRP B  37      25.631  -5.237  55.018  1.00 37.67           C
ATOM   2250  N   ILE B  38      20.423  -8.213  54.935  1.00 34.01           N
ATOM   2251  CA  ILE B  38      21.105  -9.349  54.313  1.00 34.78           C
ATOM   2252  C   ILE B  38      22.273  -8.852  53.448  1.00 35.19           C
ATOM   2253  O   ILE B  38      22.061  -8.332  52.350  1.00 35.24           O
ATOM   2254  CB  ILE B  38      20.124 -10.209  53.481  1.00 34.91           C
ATOM   2255  CG1 ILE B  38      18.917 -10.626  54.326  1.00 34.87           C
ATOM   2256  CD1 ILE B  38      17.624 -10.739  53.544  1.00 35.11           C
ATOM   2257  CG2 ILE B  38      20.833 -11.450  52.924  1.00 34.63           C
ATOM   2258  N   PRO B  39      23.500  -9.017  53.947  1.00 35.54           N
ATOM   2259  CA  PRO B  39      24.706  -8.528  53.260  1.00 35.80           C
ATOM   2260  C   PRO B  39      24.896  -9.146  51.878  1.00 35.80           C
ATOM   2261  O   PRO B  39      24.442 -10.272  51.668  1.00 35.94           O
ATOM   2262  CB  PRO B  39      25.846  -8.979  54.183  1.00 36.00           C
ATOM   2263  CG  PRO B  39      25.206  -9.208  55.512  1.00 36.08           C
ATOM   2264  CD  PRO B  39      23.827  -9.706  55.209  1.00 35.61           C
ATOM   2265  N   LYS B  45      19.967 -12.673  58.006  1.00 30.23           N
ATOM   2266  CA  LYS B  45      19.319 -11.416  58.348  1.00 29.73           C
ATOM   2267  C   LYS B  45      19.892 -10.909  59.656  1.00 29.68           C
ATOM   2268  O   LYS B  45      19.529 -11.385  60.738  1.00 30.40           O
ATOM   2269  CB  LYS B  45      17.801 -11.590  58.438  1.00 29.91           C
ATOM   2270  CG  LYS B  45      17.173 -12.197  57.179  1.00 29.96           C
ATOM   2271  CD  LYS B  45      15.689 -12.478  57.360  1.00 29.04           C
ATOM   2272  CE  LYS B  45      15.006 -12.671  56.023  1.00 28.79           C
ATOM   2273  NZ  LYS B  45      13.514 -12.655  56.141  1.00 29.30           N
ATOM   2274  N   ILE B  46      20.816  -9.959  59.546  1.00 29.44           N
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FIG. 5LL

ATOM	2275	CA	ILE	B	46	21.479	-9.376	60.706	1.00	29.19	C
ATOM	2276	C	ILE	B	46	20.662	-8.185	61.214	1.00	28.84	C
ATOM	2277	O	ILE	B	46	20.242	-7.343	60.417	1.00	28.97	O
ATOM	2278	CB	ILE	B	46	22.912	-8.934	60.342	1.00	29.26	C
ATOM	2279	CG1	ILE	B	46	23.760	-10.133	59.905	1.00	29.53	C
ATOM	2280	CD1	ILE	B	46	25.123	-9.739	59.314	1.00	30.04	C
ATOM	2281	CG2	ILE	B	46	23.580	-8.219	61.517	1.00	30.05	C
ATOM	2282	N	PRO	B	47	20.406	-8.130	62.524	1.00	28.40	N
ATOM	2283	CA	PRO	B	47	19.812	-6.934	63.139	1.00	27.73	C
ATOM	2284	C	PRO	B	47	20.737	-5.735	62.997	1.00	27.16	C
ATOM	2285	O	PRO	B	47	21.955	-5.874	63.158	1.00	27.70	O
ATOM	2286	CB	PRO	B	47	19.674	-7.316	64.617	1.00	27.98	C
ATOM	2287	CG	PRO	B	47	19.742	-8.811	64.653	1.00	28.63	C
ATOM	2288	CD	PRO	B	47	20.630	-9.207	63.505	1.00	28.50	C
ATOM	2289	N	VAL	B	48	20.165	-4.573	62.691	1.00	25.96	N
ATOM	2290	CA	VAL	B	48	20.945	-3.345	62.529	1.00	24.24	C
ATOM	2291	C	VAL	B	48	20.146	-2.134	62.976	1.00	23.62	C
ATOM	2292	O	VAL	B	48	18.928	-2.217	63.176	1.00	22.76	O
ATOM	2293	CB	VAL	B	48	21.381	-3.097	61.045	1.00	24.08	C
ATOM	2294	CG1	VAL	B	48	22.525	-4.026	60.627	1.00	24.06	C
ATOM	2295	CG2	VAL	B	48	20.191	-3.202	60.086	1.00	23.55	C
ATOM	2296	N	ALA	B	49	20.849	-1.013	63.129	1.00	22.63	N
ATOM	2297	CA	ALA	B	49	20.207	0.289	63.206	1.00	22.02	C
ATOM	2298	C	ALA	B	49	20.155	0.861	61.800	1.00	21.80	C
ATOM	2299	O	ALA	B	49	21.135	0.783	61.052	1.00	21.25	O
ATOM	2300	CB	ALA	B	49	20.961	1.221	64.146	1.00	20.54	C
ATOM	2301	N	ILE	B	50	19.001	1.406	61.430	1.00	22.56	N
ATOM	2302	CA	ILE	B	50	18.867	2.144	60.171	1.00	23.43	C
ATOM	2303	C	ILE	B	50	18.496	3.581	60.505	1.00	23.73	C
ATOM	2304	O	ILE	B	50	17.483	3.832	61.154	1.00	23.88	O
ATOM	2305	CB	ILE	B	50	17.791	1.525	59.231	1.00	23.24	C
ATOM	2306	CG1	ILE	B	50	18.074	0.047	58.952	1.00	24.08	C
ATOM	2307	CD1	ILE	B	50	16.870	-0.718	58.352	1.00	23.64	C
ATOM	2308	CG2	ILE	B	50	17.724	2.303	57.924	1.00	23.02	C
ATOM	2309	N	LYS	B	51	19.322	4.515	60.060	1.00	24.31	N
ATOM	2310	CA	LYS	B	51	19.073	5.925	60.289	1.00	25.12	C
ATOM	2311	C	LYS	B	51	18.703	6.613	58.987	1.00	25.12	C
ATOM	2312	O	LYS	B	51	19.522	6.703	58.077	1.00	25.25	O
ATOM	2313	CB	LYS	B	51	20.303	6.585	60.905	1.00	25.49	C
ATOM	2314	CG	LYS	B	51	20.044	7.959	61.496	1.00	26.70	C
ATOM	2315	CD	LYS	B	51	21.338	8.562	62.016	1.00	29.12	C
ATOM	2316	CE	LYS	B	51	21.485	8.372	63.519	1.00	30.08	C
ATOM	2317	NZ	LYS	B	51	21.591	9.691	64.199	1.00	31.87	N
ATOM	2318	N	GLU	B	52	17.458	7.078	58.912	1.00	25.40	N
ATOM	2319	CA	GLU	B	52	16.968	7.883	57.799	1.00	25.56	C
ATOM	2320	C	GLU	B	52	17.242	9.350	58.115	1.00	25.32	C
ATOM	2321	O	GLU	B	52	16.732	9.886	59.102	1.00	25.38	O
ATOM	2322	CB	GLU	B	52	15.469	7.646	57.579	1.00	25.71	C
ATOM	2323	CG	GLU	B	52	14.950	8.046	56.199	1.00	27.70	C
ATOM	2324	CD	GLU	B	52	13.672	7.303	55.805	1.00	29.86	C
ATOM	2325	OE1	GLU	B	52	13.644	6.652	54.733	1.00	30.54	O
ATOM	2326	OE2	GLU	B	52	12.689	7.356	56.568	1.00	31.09	O
ATOM	2327	N	LEU	B	53	18.052	9.991	57.278	1.00	25.08	N
ATOM	2328	CA	LEU	B	53	18.479	11.360	57.524	1.00	25.43	C
ATOM	2329	C	LEU	B	53	17.428	12.348	57.049	1.00	25.68	C
ATOM	2330	O	LEU	B	53	17.056	12.340	55.873	1.00	26.42	O
ATOM	2331	CB	LEU	B	53	19.821	11.631	56.833	1.00	24.84	C
ATOM	2332	CG	LEU	B	53	21.143	11.472	57.596	1.00	25.17	C
ATOM	2333	CD1	LEU	B	53	21.104	10.390	58.687	1.00	24.31	C
ATOM	2334	CD2	LEU	B	53	22.282	11.211	56.620	1.00	23.23	C

FIG. 5MM

```
ATOM   2335  N   LYS B  60      24.107  19.303  48.871  1.00 35.82           N
ATOM   2336  CA  LYS B  60      25.287  18.437  48.864  1.00 35.63           C
ATOM   2337  C   LYS B  60      25.186  17.305  47.836  1.00 35.36           C
ATOM   2338  O   LYS B  60      24.183  16.588  47.775  1.00 35.49           O
ATOM   2339  CB  LYS B  60      25.542  17.867  50.264  1.00 35.81           C
ATOM   2340  N   ALA B  61      26.245  17.145  47.045  1.00 34.96           N
ATOM   2341  CA  ALA B  61      26.293  16.139  45.987  1.00 34.41           C
ATOM   2342  C   ALA B  61      26.533  14.721  46.519  1.00 34.23           C
ATOM   2343  O   ALA B  61      27.185  14.533  47.545  1.00 33.85           O
ATOM   2344  CB  ALA B  61      27.357  16.506  44.981  1.00 33.96           C
ATOM   2345  N   ASN B  62      26.021  13.729  45.795  1.00 33.90           N
ATOM   2346  CA  ASN B  62      26.219  12.327  46.148  1.00 33.88           C
ATOM   2347  C   ASN B  62      27.690  11.941  46.261  1.00 33.85           C
ATOM   2348  O   ASN B  62      28.055  11.124  47.108  1.00 33.65           O
ATOM   2349  CB  ASN B  62      25.497  11.408  45.161  1.00 33.62           C
ATOM   2350  CG  ASN B  62      23.988  11.546  45.229  1.00 33.51           C
ATOM   2351  OD1 ASN B  62      23.438  11.999  46.233  1.00 32.94           O
ATOM   2352  ND2 ASN B  62      23.308  11.156  44.153  1.00 33.25           N
ATOM   2353  N   LYS B  63      28.519  12.537  45.405  1.00 34.03           N
ATOM   2354  CA  LYS B  63      29.973  12.398  45.470  1.00 34.37           C
ATOM   2355  C   LYS B  63      30.515  12.813  46.844  1.00 34.47           C
ATOM   2356  O   LYS B  63      31.297  12.083  47.462  1.00 34.54           O
ATOM   2357  CB  LYS B  63      30.630  13.228  44.364  1.00 34.22           C
ATOM   2358  CG  LYS B  63      32.119  13.443  44.550  1.00 34.56           C
ATOM   2359  CD  LYS B  63      32.742  14.126  43.350  1.00 35.60           C
ATOM   2360  CE  LYS B  63      34.118  13.554  43.056  1.00 36.59           C
ATOM   2361  NZ  LYS B  63      35.129  13.939  44.093  1.00 37.21           N
ATOM   2362  N   GLU B  64      30.084  13.982  47.312  1.00 34.76           N
ATOM   2363  CA  GLU B  64      30.470  14.490  48.623  1.00 35.26           C
ATOM   2364  C   GLU B  64      30.025  13.525  49.722  1.00 34.76           C
ATOM   2365  O   GLU B  64      30.840  13.091  50.540  1.00 35.19           O
ATOM   2366  CB  GLU B  64      29.875  15.884  48.855  1.00 36.16           C
ATOM   2367  CG  GLU B  64      30.712  17.028  48.296  1.00 38.54           C
ATOM   2368  CD  GLU B  64      29.896  18.033  47.494  1.00 41.32           C
ATOM   2369  OE1 GLU B  64      30.210  18.236  46.299  1.00 42.74           O
ATOM   2370  OE2 GLU B  64      28.946  18.631  48.050  1.00 42.99           O
ATOM   2371  N   ILE B  65      28.739  13.172  49.712  1.00 34.08           N
ATOM   2372  CA  ILE B  65      28.152  12.287  50.717  1.00 33.11           C
ATOM   2373  C   ILE B  65      28.931  10.983  50.845  1.00 32.72           C
ATOM   2374  O   ILE B  65      29.264  10.555  51.952  1.00 32.24           O
ATOM   2375  CB  ILE B  65      26.665  11.997  50.392  1.00 33.23           C
ATOM   2376  CG1 ILE B  65      25.867  13.301  50.307  1.00 32.72           C
ATOM   2377  CD1 ILE B  65      24.615  13.193  49.467  1.00 33.11           C
ATOM   2378  CG2 ILE B  65      26.048  11.033  51.425  1.00 32.17           C
ATOM   2379  N   LEU B  66      29.228  10.369  49.702  1.00 32.43           N
ATOM   2380  CA  LEU B  66      29.873   9.060  49.677  1.00 32.09           C
ATOM   2381  C   LEU B  66      31.321   9.119  50.140  1.00 31.93           C
ATOM   2382  O   LEU B  66      31.779   8.215  50.840  1.00 31.40           O
ATOM   2383  CB  LEU B  66      29.775   8.431  48.290  1.00 31.89           C
ATOM   2384  CG  LEU B  66      28.393   7.923  47.888  1.00 32.00           C
ATOM   2385  CD1 LEU B  66      28.381   7.627  46.406  1.00 32.67           C
ATOM   2386  CD2 LEU B  66      27.987   6.684  48.679  1.00 32.68           C
ATOM   2387  N   ASP B  67      32.026  10.184  49.750  1.00 31.87           N
ATOM   2388  CA  ASP B  67      33.398  10.432  50.207  1.00 31.89           C
ATOM   2389  C   ASP B  67      33.453  10.574  51.724  1.00 31.37           C
ATOM   2390  O   ASP B  67      34.335  10.010  52.371  1.00 31.49           O
ATOM   2391  CB  ASP B  67      33.989  11.681  49.541  1.00 32.19           C
ATOM   2392  CG  ASP B  67      34.594  11.391  48.169  1.00 32.97           C
ATOM   2393  OD1 ASP B  67      34.807  10.207  47.822  1.00 34.04           O
ATOM   2394  OD2 ASP B  67      34.883  12.295  47.364  1.00 33.98           O
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FIG. 5NN

```
ATOM   2395  N   GLU B  68      32.503  11.325  52.277  1.00 30.71           N
ATOM   2396  CA  GLU B  68      32.314  11.414  53.720  1.00 30.05           C
ATOM   2397  C   GLU B  68      31.983  10.046  54.321  1.00 29.64           C
ATOM   2398  O   GLU B  68      32.545   9.665  55.349  1.00 29.65           O
ATOM   2399  CB  GLU B  68      31.213  12.423  54.056  1.00 30.08           C
ATOM   2400  N   ALA B  69      31.085   9.306  53.667  1.00 28.81           N
ATOM   2401  CA  ALA B  69      30.638   8.005  54.175  1.00 28.17           C
ATOM   2402  C   ALA B  69      31.765   6.973  54.233  1.00 27.40           C
ATOM   2403  O   ALA B  69      31.764   6.109  55.110  1.00 27.34           O
ATOM   2404  CB  ALA B  69      29.453   7.473  53.360  1.00 27.86           C
ATOM   2405  N   TYR B  70      32.708   7.070  53.293  1.00 26.83           N
ATOM   2406  CA  TYR B  70      33.913   6.241  53.281  1.00 26.18           C
ATOM   2407  C   TYR B  70      34.724   6.441  54.563  1.00 25.63           C
ATOM   2408  O   TYR B  70      34.999   5.487  55.290  1.00 25.75           O
ATOM   2409  CB  TYR B  70      34.784   6.573  52.063  1.00 26.20           C
ATOM   2410  N   VAL B  71      35.105   7.687  54.827  1.00 24.50           N
ATOM   2411  CA  VAL B  71      35.759   8.048  56.083  1.00 23.93           C
ATOM   2412  C   VAL B  71      35.008   7.436  57.277  1.00 23.40           C
ATOM   2413  O   VAL B  71      35.594   6.686  58.054  1.00 23.33           O
ATOM   2414  CB  VAL B  71      35.896   9.582  56.215  1.00 23.65           C
ATOM   2415  CG1 VAL B  71      36.481   9.963  57.557  1.00 24.23           C
ATOM   2416  CG2 VAL B  71      36.758  10.135  55.086  1.00 22.88           C
ATOM   2417  N   MET B  72      33.704   7.707  57.375  1.00 22.98           N
ATOM   2418  CA  MET B  72      32.867   7.205  58.472  1.00 22.35           C
ATOM   2419  C   MET B  72      32.937   5.700  58.691  1.00 22.28           C
ATOM   2420  O   MET B  72      32.876   5.232  59.836  1.00 21.97           O
ATOM   2421  CB  MET B  72      31.413   7.621  58.293  1.00 22.55           C
ATOM   2422  CG  MET B  72      31.153   9.106  58.455  1.00 23.54           C
ATOM   2423  SD  MET B  72      29.707   9.594  57.495  1.00 25.55           S
ATOM   2424  CE  MET B  72      28.386   9.081  58.572  1.00 23.25           C
ATOM   2425  N   ALA B  73      33.075   4.958  57.588  1.00 21.57           N
ATOM   2426  CA  ALA B  73      33.123   3.499  57.592  1.00 20.92           C
ATOM   2427  C   ALA B  73      34.492   2.917  57.943  1.00 20.93           C
ATOM   2428  O   ALA B  73      34.629   1.701  58.161  1.00 20.50           O
ATOM   2429  CB  ALA B  73      32.667   2.969  56.243  1.00 20.91           C
ATOM   2430  N   SER B  74      35.507   3.775  57.967  1.00 21.07           N
ATOM   2431  CA  SER B  74      36.868   3.358  58.267  1.00 21.12           C
ATOM   2432  C   SER B  74      37.177   3.439  59.776  1.00 21.58           C
ATOM   2433  O   SER B  74      38.204   2.937  60.237  1.00 21.30           O
ATOM   2434  CB  SER B  74      37.853   4.223  57.483  1.00 21.34           C
ATOM   2435  OG  SER B  74      37.886   5.542  58.000  1.00 20.80           O
ATOM   2436  N   VAL B  75      36.285   4.073  60.534  1.00 21.73           N
ATOM   2437  CA  VAL B  75      36.480   4.261  61.969  1.00 22.25           C
ATOM   2438  C   VAL B  75      36.382   2.920  62.702  1.00 22.43           C
ATOM   2439  O   VAL B  75      35.314   2.312  62.767  1.00 22.56           O
ATOM   2440  CB  VAL B  75      35.468   5.288  62.547  1.00 22.60           C
ATOM   2441  CG1 VAL B  75      35.373   5.161  64.045  1.00 22.97           C
ATOM   2442  CG2 VAL B  75      35.871   6.702  62.162  1.00 21.91           C
ATOM   2443  N   ASP B  76      37.505   2.464  63.241  1.00 22.26           N
ATOM   2444  CA  ASP B  76      37.575   1.147  63.857  1.00 22.70           C
ATOM   2445  C   ASP B  76      38.123   1.219  65.286  1.00 21.92           C
ATOM   2446  O   ASP B  76      39.325   1.091  65.523  1.00 21.82           O
ATOM   2447  CB  ASP B  76      38.410   0.201  62.980  1.00 23.88           C
ATOM   2448  CG  ASP B  76      38.331  -1.239  63.432  1.00 25.38           C
ATOM   2449  OD1 ASP B  76      37.334  -1.612  64.086  1.00 28.10           O
ATOM   2450  OD2 ASP B  76      39.222  -2.076  63.184  1.00 28.14           O
ATOM   2451  N   ASN B  77      37.211   1.449  66.222  1.00 20.75           N
ATOM   2452  CA  ASN B  77      37.519   1.570  67.632  1.00 19.45           C
ATOM   2453  C   ASN B  77      36.298   1.114  68.421  1.00 18.63           C
ATOM   2454  O   ASN B  77      35.176   1.410  68.020  1.00 18.76           O
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FIG. 5OO

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ATOM   2455  CB  ASN B  77      37.852   3.021  67.978  1.00 19.30           C
ATOM   2456  CG  ASN B  77      38.111   3.217  69.455  1.00 19.07           C
ATOM   2457  OD1 ASN B  77      37.210   3.558  70.219  1.00 18.90           O
ATOM   2458  ND2 ASN B  77      39.338   2.961  69.872  1.00 19.78           N
ATOM   2459  N   PRO B  78      36.503   0.403  69.531  1.00 18.22           N
ATOM   2460  CA  PRO B  78      35.381  -0.112  70.338  1.00 17.65           C
ATOM   2461  C   PRO B  78      34.465   0.970  70.925  1.00 17.30           C
ATOM   2462  O   PRO B  78      33.376   0.636  71.380  1.00 17.27           O
ATOM   2463  CB  PRO B  78      36.077  -0.875  71.476  1.00 17.40           C
ATOM   2464  CG  PRO B  78      37.469  -1.111  71.003  1.00 17.81           C
ATOM   2465  CD  PRO B  78      37.814   0.015  70.091  1.00 17.79           C
ATOM   2466  N   HIS B  79      34.886   2.231  70.903  1.00 16.76           N
ATOM   2467  CA  HIS B  79      34.107   3.298  71.511  1.00 16.62           C
ATOM   2468  C   HIS B  79      33.640   4.376  70.540  1.00 17.28           C
ATOM   2469  O   HIS B  79      33.203   5.455  70.957  1.00 16.78           O
ATOM   2470  CB  HIS B  79      34.863   3.884  72.699  1.00 16.25           C
ATOM   2471  CG  HIS B  79      35.187   2.864  73.739  1.00 15.59           C
ATOM   2472  ND1 HIS B  79      34.214   2.225  74.477  1.00 15.58           N
ATOM   2473  CE1 HIS B  79      34.783   1.360  75.295  1.00 15.24           C
ATOM   2474  NE2 HIS B  79      36.090   1.407  75.106  1.00 15.70           N
ATOM   2475  CD2 HIS B  79      36.367   2.330  74.128  1.00 15.23           C
ATOM   2476  N   VAL B  80      33.731   4.071  69.247  1.00 18.09           N
ATOM   2477  CA  VAL B  80      33.107   4.882  68.203  1.00 19.06           C
ATOM   2478  C   VAL B  80      32.332   3.958  67.255  1.00 19.99           C
ATOM   2479  O   VAL B  80      32.827   2.885  66.875  1.00 20.37           O
ATOM   2480  CB  VAL B  80      34.141   5.727  67.408  1.00 19.07           C
ATOM   2481  CG1 VAL B  80      33.440   6.716  66.492  1.00 18.71           C
ATOM   2482  CG2 VAL B  80      35.099   6.480  68.349  1.00 18.69           C
ATOM   2483  N   CYS B  81      31.115   4.369  66.902  1.00 20.57           N
ATOM   2484  CA  CYS B  81      30.274   3.661  65.932  1.00 21.04           C
ATOM   2485  C   CYS B  81      30.789   3.803  64.492  1.00 21.16           C
ATOM   2486  O   CYS B  81      30.920   4.919  63.973  1.00 20.67           O
ATOM   2487  CB  CYS B  81      28.850   4.208  65.987  1.00 20.66           C
ATOM   2488  SG  CYS B  81      27.968   3.883  67.528  1.00 24.94           S
ATOM   2489  N   ARG B  82      31.062   2.677  63.840  1.00 21.12           N
ATOM   2490  CA  ARG B  82      31.383   2.712  62.415  1.00 21.57           C
ATOM   2491  C   ARG B  82      30.149   2.585  61.536  1.00 21.20           C
ATOM   2492  O   ARG B  82      29.220   1.834  61.857  1.00 20.65           O
ATOM   2493  CB  ARG B  82      32.442   1.672  62.015  1.00 21.61           C
ATOM   2494  CG  ARG B  82      32.103   0.224  62.254  1.00 24.13           C
ATOM   2495  CD  ARG B  82      33.068  -0.757  61.551  1.00 25.41           C
ATOM   2496  NE  ARG B  82      33.310  -0.339  60.175  1.00 26.67           N
ATOM   2497  CZ  ARG B  82      33.087  -1.094  59.099  1.00 27.89           C
ATOM   2498  NH1 ARG B  82      33.321  -0.606  57.887  1.00 27.21           N
ATOM   2499  NH2 ARG B  82      32.635  -2.336  59.226  1.00 28.49           N
ATOM   2500  N   LEU B  83      30.158   3.326  60.430  1.00 20.59           N
ATOM   2501  CA  LEU B  83      29.180   3.146  59.371  1.00 21.03           C
ATOM   2502  C   LEU B  83      29.392   1.808  58.664  1.00 21.12           C
ATOM   2503  O   LEU B  83      30.474   1.547  58.128  1.00 21.23           O
ATOM   2504  CB  LEU B  83      29.262   4.291  58.355  1.00 20.75           C
ATOM   2505  CG  LEU B  83      28.126   4.305  57.323  1.00 20.46           C
ATOM   2506  CD1 LEU B  83      26.777   4.404  58.020  1.00 18.57           C
ATOM   2507  CD2 LEU B  83      28.306   5.437  56.324  1.00 20.59           C
ATOM   2508  N   LEU B  84      28.361   0.966  58.672  1.00 21.46           N
ATOM   2509  CA  LEU B  84      28.424  -0.332  57.993  1.00 21.83           C
ATOM   2510  C   LEU B  84      28.043  -0.215  56.524  1.00 22.01           C
ATOM   2511  O   LEU B  84      28.692  -0.808  55.662  1.00 22.89           O
ATOM   2512  CB  LEU B  84      27.535  -1.367  58.688  1.00 21.87           C
ATOM   2513  CG  LEU B  84      27.909  -1.870  60.091  1.00 22.94           C
ATOM   2514  CD1 LEU B  84      27.063  -3.086  60.458  1.00 22.71           C
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FIG. 5PP

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ATOM   2515  CD2 LEU B  84      29.400  -2.209  60.202  1.00 23.06           C
ATOM   2516  N   GLY B  85      26.993   0.556  56.246  1.00 21.90           N
ATOM   2517  CA  GLY B  85      26.523   0.764  54.887  1.00 21.72           C
ATOM   2518  C   GLY B  85      25.743   2.051  54.657  1.00 21.48           C
ATOM   2519  O   GLY B  85      25.283   2.708  55.592  1.00 20.43           O
ATOM   2520  N   ILE B  86      25.609   2.414  53.388  1.00 22.03           N
ATOM   2521  CA  ILE B  86      24.823   3.576  52.993  1.00 23.02           C
ATOM   2522  C   ILE B  86      23.897   3.230  51.834  1.00 23.29           C
ATOM   2523  O   ILE B  86      24.248   2.443  50.962  1.00 23.90           O
ATOM   2524  CB  ILE B  86      25.748   4.787  52.655  1.00 22.54           C
ATOM   2525  CG1 ILE B  86      24.923   6.037  52.322  1.00 22.40           C
ATOM   2526  CD1 ILE B  86      25.665   7.360  52.519  1.00 20.16           C
ATOM   2527  CG2 ILE B  86      26.748   4.434  51.547  1.00 23.46           C
ATOM   2528  N   CYS B  87      22.711   3.828  51.837  1.00 24.14           N
ATOM   2529  CA  CYS B  87      21.762   3.680  50.744  1.00 24.38           C
ATOM   2530  C   CYS B  87      21.235   5.041  50.329  1.00 24.49           C
ATOM   2531  O   CYS B  87      20.686   5.771  51.159  1.00 24.32           O
ATOM   2532  CB  CYS B  87      20.600   2.779  51.154  1.00 23.75           C
ATOM   2533  SG  CYS B  87      19.374   2.580  49.848  1.00 25.50           S
ATOM   2534  N   LEU B  88      21.401   5.367  49.047  1.00 24.76           N
ATOM   2535  CA  LEU B  88      20.933   6.643  48.496  1.00 25.70           C
ATOM   2536  C   LEU B  88      19.710   6.471  47.606  1.00 26.24           C
ATOM   2537  O   LEU B  88      19.830   6.040  46.459  1.00 27.00           O
ATOM   2538  CB  LEU B  88      22.035   7.357  47.699  1.00 25.41           C
ATOM   2539  CG  LEU B  88      23.445   7.532  48.285  1.00 26.65           C
ATOM   2540  CD1 LEU B  88      24.448   7.779  47.158  1.00 26.03           C
ATOM   2541  CD2 LEU B  88      23.505   8.658  49.318  1.00 25.11           C
ATOM   2542  N   THR B  89      18.534   6.789  48.143  1.00 26.96           N
ATOM   2543  CA  THR B  89      17.317   6.883  47.339  1.00 27.40           C
ATOM   2544  C   THR B  89      16.668   8.240  47.589  1.00 27.88           C
ATOM   2545  O   THR B  89      17.355   9.258  47.554  1.00 29.14           O
ATOM   2546  CB  THR B  89      16.347   5.709  47.604  1.00 27.45           C
ATOM   2547  OG1 THR B  89      16.151   5.544  49.013  1.00 27.64           O
ATOM   2548  CG2 THR B  89      16.967   4.383  47.171  1.00 26.98           C
ATOM   2549  N   SER B  90      15.363   8.274  47.835  1.00 28.04           N
ATOM   2550  CA  SER B  90      14.683   9.538  48.128  1.00 27.95           C
ATOM   2551  C   SER B  90      15.281  10.176  49.384  1.00 27.91           C
ATOM   2552  O   SER B  90      15.338  11.402  49.513  1.00 27.35           O
ATOM   2553  CB  SER B  90      13.178   9.322  48.301  1.00 27.76           C
ATOM   2554  N   THR B  91      15.726   9.324  50.304  1.00 27.53           N
ATOM   2555  CA  THR B  91      16.449   9.768  51.487  1.00 27.38           C
ATOM   2556  C   THR B  91      17.796   9.074  51.494  1.00 26.76           C
ATOM   2557  O   THR B  91      17.957   8.045  50.843  1.00 27.69           O
ATOM   2558  CB  THR B  91      15.676   9.378  52.758  1.00 27.65           C
ATOM   2559  OG1 THR B  91      15.419   7.964  52.738  1.00 28.16           O
ATOM   2560  CG2 THR B  91      14.273  10.009  52.781  1.00 27.34           C
ATOM   2561  N   VAL B  92      18.765   9.628  52.215  1.00 26.07           N
ATOM   2562  CA  VAL B  92      19.963   8.859  52.555  1.00 25.56           C
ATOM   2563  C   VAL B  92      19.701   8.055  53.840  1.00 25.11           C
ATOM   2564  O   VAL B  92      19.095   8.554  54.789  1.00 25.18           O
ATOM   2565  CB  VAL B  92      21.276   9.726  52.590  1.00 25.80           C
ATOM   2566  CG1 VAL B  92      20.970  11.215  52.652  1.00 26.18           C
ATOM   2567  CG2 VAL B  92      22.228   9.299  53.710  1.00 25.19           C
ATOM   2568  N   GLN B  93      20.127   6.797  53.837  1.00 24.35           N
ATOM   2569  CA  GLN B  93      19.879   5.882  54.946  1.00 23.94           C
ATOM   2570  C   GLN B  93      21.175   5.218  55.374  1.00 23.50           C
ATOM   2571  O   GLN B  93      21.879   4.617  54.557  1.00 23.29           O
ATOM   2572  CB  GLN B  93      18.855   4.812  54.553  1.00 23.94           C
ATOM   2573  CG  GLN B  93      17.436   5.322  54.364  1.00 24.30           C
ATOM   2574  CD  GLN B  93      16.438   4.194  54.220  1.00 25.21           C
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FIG. 5QQ

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ATOM   2575  OE1 GLN B  93      15.989   3.627  55.217  1.00 25.55           O
ATOM   2576  NE2 GLN B  93      16.101   3.852  52.985  1.00 25.37           N
ATOM   2577  N   LEU B  94      21.487   5.324  56.660  1.00 23.14           N
ATOM   2578  CA  LEU B  94      22.754   4.817  57.171  1.00 22.90           C
ATOM   2579  C   LEU B  94      22.538   3.572  58.013  1.00 22.73           C
ATOM   2580  O   LEU B  94      21.736   3.574  58.944  1.00 22.24           O
ATOM   2581  CB  LEU B  94      23.487   5.893  57.973  1.00 22.86           C
ATOM   2582  CG  LEU B  94      23.767   7.250  57.317  1.00 23.23           C
ATOM   2583  CD1 LEU B  94      24.284   8.221  58.362  1.00 21.95           C
ATOM   2584  CD2 LEU B  94      24.766   7.146  56.151  1.00 23.29           C
ATOM   2585  N   ILE B  95      23.264   2.512  57.670  1.00 22.93           N
ATOM   2586  CA  ILE B  95      23.153   1.233  58.358  1.00 23.65           C
ATOM   2587  C   ILE B  95      24.368   1.058  59.268  1.00 24.36           C
ATOM   2588  O   ILE B  95      25.505   1.207  58.824  1.00 24.72           O
ATOM   2589  CB  ILE B  95      23.025   0.059  57.328  1.00 23.42           C
ATOM   2590  CG1 ILE B  95      21.623   0.024  56.701  1.00 22.82           C
ATOM   2591  CD1 ILE B  95      21.383   1.054  55.590  1.00 21.22           C
ATOM   2592  CG2 ILE B  95      23.322  -1.289  57.989  1.00 22.89           C
ATOM   2593  N   THR B  96      24.112   0.775  60.543  1.00 25.04           N
ATOM   2594  CA  THR B  96      25.165   0.560  61.538  1.00 26.08           C
ATOM   2595  C   THR B  96      24.816  -0.623  62.431  1.00 26.75           C
ATOM   2596  O   THR B  96      23.778  -1.276  62.252  1.00 26.73           O
ATOM   2597  CB  THR B  96      25.361   1.811  62.435  1.00 26.32           C
ATOM   2598  OG1 THR B  96      24.198   1.995  63.258  1.00 26.97           O
ATOM   2599  CG2 THR B  96      25.446   3.098  61.611  1.00 25.72           C
ATOM   2600  N   GLN B  97      25.682  -0.882  63.407  1.00 27.33           N
ATOM   2601  CA  GLN B  97      25.415  -1.893  64.416  1.00 27.72           C
ATOM   2602  C   GLN B  97      24.342  -1.396  65.382  1.00 27.90           C
ATOM   2603  O   GLN B  97      24.411  -0.272  65.888  1.00 27.68           O
ATOM   2604  CB  GLN B  97      26.692  -2.249  65.175  1.00 27.95           C
ATOM   2605  CG  GLN B  97      26.575  -3.505  66.030  1.00 28.85           C
ATOM   2606  CD  GLN B  97      27.791  -3.733  66.898  1.00 30.48           C
ATOM   2607  OE1 GLN B  97      28.927  -3.699  66.415  1.00 30.45           O
ATOM   2608  NE2 GLN B  97      27.562  -3.976  68.182  1.00 31.15           N
ATOM   2609  N   LEU B  98      23.353  -2.249  65.628  1.00 27.99           N
ATOM   2610  CA  LEU B  98      22.275  -1.946  66.560  1.00 28.25           C
ATOM   2611  C   LEU B  98      22.820  -1.773  67.973  1.00 28.10           C
ATOM   2612  O   LEU B  98      23.499  -2.651  68.497  1.00 28.46           O
ATOM   2613  CB  LEU B  98      21.226  -3.062  66.525  1.00 28.18           C
ATOM   2614  CG  LEU B  98      20.001  -2.977  67.431  1.00 28.87           C
ATOM   2615  CD1 LEU B  98      18.983  -2.028  66.857  1.00 29.73           C
ATOM   2616  CD2 LEU B  98      19.403  -4.355  67.593  1.00 29.80           C
ATOM   2617  N   MET B  99      22.540  -0.626  68.578  1.00 27.86           N
ATOM   2618  CA  MET B  99      22.921  -0.406  69.963  1.00 27.53           C
ATOM   2619  C   MET B  99      21.686  -0.425  70.861  1.00 27.17           C
ATOM   2620  O   MET B  99      20.962   0.565  70.976  1.00 27.76           O
ATOM   2621  CB  MET B  99      23.763   0.852  70.120  1.00 27.77           C
ATOM   2622  CG  MET B  99      25.065   0.538  70.820  1.00 28.91           C
ATOM   2623  SD  MET B  99      26.547   0.790  69.889  1.00 29.11           S
ATOM   2624  CE  MET B  99      26.574  -0.601  68.791  1.00 29.87           C
ATOM   2625  N   PRO B 100      21.456  -1.589  71.468  1.00 26.21           N
ATOM   2626  CA  PRO B 100      20.168  -1.968  72.065  1.00 25.16           C
ATOM   2627  C   PRO B 100      19.660  -1.162  73.262  1.00 24.07           C
ATOM   2628  O   PRO B 100      18.461  -1.184  73.521  1.00 23.91           O
ATOM   2629  CB  PRO B 100      20.415  -3.422  72.491  1.00 25.31           C
ATOM   2630  CG  PRO B 100      21.538  -3.873  71.610  1.00 25.47           C
ATOM   2631  CD  PRO B 100      22.442  -2.677  71.584  1.00 26.61           C
ATOM   2632  N   PHE B 101      20.532  -0.483  73.994  1.00 23.55           N
ATOM   2633  CA  PHE B 101      20.065   0.315  75.129  1.00 21.97           C
ATOM   2634  C   PHE B 101      19.858   1.783  74.748  1.00 21.55           C
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FIG. 5RR

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ATOM   2635  O   PHE B 101      19.432   2.605  75.566  1.00 21.46           O
ATOM   2636  CB  PHE B 101      20.990   0.149  76.328  1.00 21.63           C
ATOM   2637  CG  PHE B 101      20.986  -1.237  76.910  1.00 20.98           C
ATOM   2638  CD1 PHE B 101      20.123  -1.573  77.951  1.00 20.86           C
ATOM   2639  CE1 PHE B 101      20.129  -2.862  78.495  1.00 20.19           C
ATOM   2640  CZ  PHE B 101      21.006  -3.819  78.002  1.00 19.17           C
ATOM   2641  CE2 PHE B 101      21.865  -3.492  76.969  1.00 20.10           C
ATOM   2642  CD2 PHE B 101      21.852  -2.205  76.429  1.00 20.98           C
ATOM   2643  N   GLY B 102      20.145   2.097  73.490  1.00 20.66           N
ATOM   2644  CA  GLY B 102      19.847   3.406  72.949  1.00 20.06           C
ATOM   2645  C   GLY B 102      20.822   4.498  73.346  1.00 20.02           C
ATOM   2646  O   GLY B 102      22.015   4.270  73.558  1.00 19.74           O
ATOM   2647  N   CYS B 103      20.279   5.698  73.454  1.00 19.12           N
ATOM   2648  CA  CYS B 103      21.035   6.907  73.683  1.00 19.11           C
ATOM   2649  C   CYS B 103      21.391   7.115  75.166  1.00 18.29           C
ATOM   2650  O   CYS B 103      20.535   6.981  76.051  1.00 17.97           O
ATOM   2651  CB  CYS B 103      20.193   8.056  73.140  1.00 20.09           C
ATOM   2652  SG  CYS B 103      20.807   9.700  73.416  1.00 23.15           S
ATOM   2653  N   LEU B 104      22.660   7.440  75.427  1.00 17.12           N
ATOM   2654  CA  LEU B 104      23.153   7.655  76.790  1.00 15.63           C
ATOM   2655  C   LEU B 104      22.440   8.788  77.535  1.00 15.39           C
ATOM   2656  O   LEU B 104      22.253   8.709  78.755  1.00 14.67           O
ATOM   2657  CB  LEU B 104      24.661   7.904  76.790  1.00 15.18           C
ATOM   2658  CG  LEU B 104      25.365   7.970  78.156  1.00 15.34           C
ATOM   2659  CD1 LEU B 104      25.218   6.674  78.974  1.00 14.66           C
ATOM   2660  CD2 LEU B 104      26.846   8.340  77.987  1.00 16.28           C
ATOM   2661  N   LEU B 105      22.065   9.839  76.803  1.00 14.31           N
ATOM   2662  CA  LEU B 105      21.304  10.936  77.381  1.00 14.50           C
ATOM   2663  C   LEU B 105      20.001  10.439  78.012  1.00 13.83           C
ATOM   2664  O   LEU B 105      19.724  10.752  79.164  1.00 13.04           O
ATOM   2665  CB  LEU B 105      21.024  12.043  76.343  1.00 14.26           C
ATOM   2666  CG  LEU B 105      20.303  13.275  76.910  1.00 14.49           C
ATOM   2667  CD1 LEU B 105      21.073  13.881  78.067  1.00 13.80           C
ATOM   2668  CD2 LEU B 105      19.998  14.322  75.845  1.00 14.77           C
ATOM   2669  N   ASP B 106      19.222   9.673  77.242  1.00 14.14           N
ATOM   2670  CA  ASP B 106      17.959   9.102  77.698  1.00 15.05           C
ATOM   2671  C   ASP B 106      18.206   8.073  78.791  1.00 15.23           C
ATOM   2672  O   ASP B 106      17.441   7.974  79.751  1.00 15.20           O
ATOM   2673  CB  ASP B 106      17.196   8.455  76.533  1.00 15.46           C
ATOM   2674  CG  ASP B 106      16.851   9.448  75.438  1.00 17.25           C
ATOM   2675  OD1 ASP B 106      16.785   9.032  74.259  1.00 19.23           O
ATOM   2676  OD2 ASP B 106      16.644  10.667  75.655  1.00 17.57           O
ATOM   2677  N   TYR B 107      19.295   7.328  78.649  1.00 15.49           N
ATOM   2678  CA  TYR B 107      19.653   6.317  79.624  1.00 16.54           C
ATOM   2679  C   TYR B 107      19.793   6.881  81.044  1.00 16.61           C
ATOM   2680  O   TYR B 107      19.169   6.364  81.980  1.00 15.97           O
ATOM   2681  CB  TYR B 107      20.928   5.588  79.202  1.00 16.82           C
ATOM   2682  CG  TYR B 107      21.189   4.361  80.028  1.00 17.98           C
ATOM   2683  CD1 TYR B 107      20.532   3.163  79.757  1.00 18.47           C
ATOM   2684  CE1 TYR B 107      20.772   2.030  80.522  1.00 19.67           C
ATOM   2685  CZ  TYR B 107      21.668   2.095  81.570  1.00 20.24           C
ATOM   2686  OH  TYR B 107      21.911   0.977  82.339  1.00 22.83           O
ATOM   2687  CE2 TYR B 107      22.327   3.275  81.863  1.00 19.35           C
ATOM   2688  CD2 TYR B 107      22.084   4.398  81.093  1.00 19.26           C
ATOM   2689  N   VAL B 108      20.590   7.945  81.190  1.00 16.66           N
ATOM   2690  CA  VAL B 108      20.836   8.556  82.497  1.00 17.11           C
ATOM   2691  C   VAL B 108      19.616   9.300  83.040  1.00 18.07           C
ATOM   2692  O   VAL B 108      19.456   9.422  84.259  1.00 18.49           O
ATOM   2693  CB  VAL B 108      22.115   9.446  82.547  1.00 16.82           C
ATOM   2694  CG1 VAL B 108      23.351   8.640  82.139  1.00 16.10           C
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FIG. 5SS

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ATOM   2695  CG2 VAL B 108      21.971  10.688  81.665  1.00 16.53           C
ATOM   2696  N   ARG B 109      18.755   9.786  82.147  1.00 18.27           N
ATOM   2697  CA  ARG B 109      17.487  10.370  82.580  1.00 18.81           C
ATOM   2698  C   ARG B 109      16.569   9.280  83.111  1.00 19.62           C
ATOM   2699  O   ARG B 109      15.923   9.466  84.133  1.00 19.14           O
ATOM   2700  CB  ARG B 109      16.798  11.135  81.446  1.00 18.22           C
ATOM   2701  CG  ARG B 109      17.355  12.513  81.226  1.00 17.93           C
ATOM   2702  CD  ARG B 109      16.975  13.100  79.893  1.00 17.88           C
ATOM   2703  NE  ARG B 109      17.628  14.380  79.669  1.00 17.68           N
ATOM   2704  CZ  ARG B 109      17.462  15.125  78.584  1.00 18.11           C
ATOM   2705  NH1 ARG B 109      16.652  14.718  77.607  1.00 16.86           N
ATOM   2706  NH2 ARG B 109      18.108  16.279  78.475  1.00 17.17           N
ATOM   2707  N   GLU B 110      16.541   8.140  82.417  1.00 21.12           N
ATOM   2708  CA  GLU B 110      15.657   7.028  82.760  1.00 22.63           C
ATOM   2709  C   GLU B 110      16.123   6.232  83.980  1.00 22.58           C
ATOM   2710  O   GLU B 110      15.310   5.692  84.722  1.00 22.68           O
ATOM   2711  CB  GLU B 110      15.497   6.091  81.560  1.00 23.54           C
ATOM   2712  CG  GLU B 110      14.269   5.197  81.625  1.00 26.48           C
ATOM   2713  CD  GLU B 110      14.147   4.265  80.437  1.00 29.89           C
ATOM   2714  OE1 GLU B 110      13.825   3.072  80.655  1.00 32.31           O
ATOM   2715  OE2 GLU B 110      14.362   4.719  79.286  1.00 31.50           O
ATOM   2716  N   HIS B 111      17.432   6.163  84.187  1.00 23.09           N
ATOM   2717  CA  HIS B 111      17.984   5.295  85.227  1.00 22.79           C
ATOM   2718  C   HIS B 111      18.700   6.039  86.349  1.00 23.14           C
ATOM   2719  O   HIS B 111      19.431   5.434  87.139  1.00 23.70           O
ATOM   2720  CB  HIS B 111      18.868   4.227  84.596  1.00 22.31           C
ATOM   2721  CG  HIS B 111      18.102   3.224  83.792  1.00 22.56           C
ATOM   2722  ND1 HIS B 111      18.223   3.116  82.424  1.00 22.37           N
ATOM   2723  CE1 HIS B 111      17.422   2.161  81.988  1.00 23.23           C
ATOM   2724  NE2 HIS B 111      16.778   1.651  83.025  1.00 23.00           N
ATOM   2725  CD2 HIS B 111      17.183   2.302  84.163  1.00 22.67           C
ATOM   2726  N   LYS B 112      18.440   7.343  86.432  1.00 23.33           N
ATOM   2727  CA  LYS B 112      18.998   8.219  87.462  1.00 24.62           C
ATOM   2728  C   LYS B 112      19.122   7.579  88.861  1.00 25.25           C
ATOM   2729  O   LYS B 112      20.185   7.649  89.489  1.00 25.69           O
ATOM   2730  CB  LYS B 112      18.174   9.511  87.553  1.00 24.52           C
ATOM   2731  N   ASP B 113      18.047   6.952  89.331  1.00 25.01           N
ATOM   2732  CA  ASP B 113      18.010   6.398  90.682  1.00 25.77           C
ATOM   2733  C   ASP B 113      18.918   5.182  90.876  1.00 25.63           C
ATOM   2734  O   ASP B 113      19.302   4.876  91.999  1.00 25.32           O
ATOM   2735  CB  ASP B 113      16.569   6.057  91.100  1.00 25.80           C
ATOM   2736  N   ASN B 114      19.258   4.503  89.784  1.00 25.68           N
ATOM   2737  CA  ASN B 114      20.008   3.250  89.854  1.00 25.96           C
ATOM   2738  C   ASN B 114      21.384   3.254  89.153  1.00 25.63           C
ATOM   2739  O   ASN B 114      21.887   2.186  88.791  1.00 26.34           O
ATOM   2740  CB  ASN B 114      19.177   2.081  89.281  1.00 26.21           C
ATOM   2741  CG  ASN B 114      17.848   1.869  89.996  1.00 27.41           C
ATOM   2742  OD1 ASN B 114      16.875   1.437  89.376  1.00 28.66           O
ATOM   2743  ND2 ASN B 114      17.801   2.151  91.293  1.00 28.65           N
ATOM   2744  N   ILE B 115      21.991   4.421  88.951  1.00 24.55           N
ATOM   2745  CA  ILE B 115      23.323   4.467  88.329  1.00 23.47           C
ATOM   2746  C   ILE B 115      24.391   4.764  89.372  1.00 22.55           C
ATOM   2747  O   ILE B 115      24.312   5.767  90.069  1.00 23.36           O
ATOM   2748  CB  ILE B 115      23.385   5.512  87.180  1.00 23.35           C
ATOM   2749  CG1 ILE B 115      22.575   5.043  85.968  1.00 22.75           C
ATOM   2750  CD1 ILE B 115      22.255   6.152  84.979  1.00 20.82           C
ATOM   2751  CG2 ILE B 115      24.832   5.780  86.768  1.00 23.59           C
ATOM   2752  N   GLY B 116      25.388   3.894  89.469  1.00 21.49           N
ATOM   2753  CA  GLY B 116      26.478   4.089  90.401  1.00 20.02           C
ATOM   2754  C   GLY B 116      27.621   4.913  89.839  1.00 19.62           C
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FIG. 5TT

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ATOM   2755  O   GLY B 116      27.713   5.155  88.632  1.00 19.06           O
ATOM   2756  N   SER B 117      28.508   5.332  90.733  1.00 19.01           N
ATOM   2757  CA  SER B 117      29.662   6.137  90.368  1.00 18.71           C
ATOM   2758  C   SER B 117      30.670   5.377  89.505  1.00 18.22           C
ATOM   2759  O   SER B 117      31.384   5.986  88.708  1.00 18.79           O
ATOM   2760  CB  SER B 117      30.341   6.693  91.619  1.00 18.47           C
ATOM   2761  OG  SER B 117      30.498   5.686  92.602  1.00 19.34           O
ATOM   2762  N   GLN B 118      30.729   4.059  89.654  1.00 18.01           N
ATOM   2763  CA  GLN B 118      31.590   3.243  88.791  1.00 17.95           C
ATOM   2764  C   GLN B 118      31.207   3.400  87.318  1.00 17.29           C
ATOM   2765  O   GLN B 118      32.068   3.654  86.487  1.00 17.53           O
ATOM   2766  CB  GLN B 118      31.573   1.763  89.188  1.00 17.74           C
ATOM   2767  CG  GLN B 118      32.547   0.906  88.383  1.00 18.17           C
ATOM   2768  CD  GLN B 118      34.010   1.238  88.691  1.00 20.76           C
ATOM   2769  OE1 GLN B 118      34.630   2.059  87.995  1.00 22.83           O
ATOM   2770  NE2 GLN B 118      34.562   0.605  89.722  1.00 17.47           N
ATOM   2771  N   TYR B 119      29.920   3.264  87.016  1.00 16.46           N
ATOM   2772  CA  TYR B 119      29.425   3.397  85.642  1.00 16.77           C
ATOM   2773  C   TYR B 119      29.732   4.759  85.030  1.00 15.75           C
ATOM   2774  O   TYR B 119      30.304   4.829  83.941  1.00 16.09           O
ATOM   2775  CB  TYR B 119      27.921   3.087  85.564  1.00 17.48           C
ATOM   2776  CG  TYR B 119      27.619   1.617  85.669  1.00 19.94           C
ATOM   2777  CD1 TYR B 119      27.203   0.893  84.561  1.00 22.91           C
ATOM   2778  CE1 TYR B 119      26.940  -0.472  84.649  1.00 24.67           C
ATOM   2779  CZ  TYR B 119      27.097  -1.115  85.861  1.00 25.23           C
ATOM   2780  OH  TYR B 119      26.841  -2.461  85.965  1.00 27.73           O
ATOM   2781  CE2 TYR B 119      27.516  -0.413  86.976  1.00 24.46           C
ATOM   2782  CD2 TYR B 119      27.777   0.939  86.874  1.00 22.91           C
ATOM   2783  N   LEU B 120      29.375   5.831  85.742  1.00 14.38           N
ATOM   2784  CA  LEU B 120      29.575   7.197  85.252  1.00 13.81           C
ATOM   2785  C   LEU B 120      31.025   7.502  84.900  1.00 13.16           C
ATOM   2786  O   LEU B 120      31.301   8.053  83.842  1.00 13.76           O
ATOM   2787  CB  LEU B 120      29.052   8.235  86.253  1.00 13.58           C
ATOM   2788  CG  LEU B 120      27.543   8.256  86.469  1.00 12.23           C
ATOM   2789  CD1 LEU B 120      27.223   8.790  87.859  1.00 13.28           C
ATOM   2790  CD2 LEU B 120      26.873   9.093  85.402  1.00 12.82           C
ATOM   2791  N   LEU B 121      31.946   7.139  85.784  1.00 12.77           N
ATOM   2792  CA  LEU B 121      33.357   7.370  85.526  1.00 12.25           C
ATOM   2793  C   LEU B 121      33.882   6.459  84.411  1.00 12.37           C
ATOM   2794  O   LEU B 121      34.667   6.906  83.581  1.00 12.42           O
ATOM   2795  CB  LEU B 121      34.184   7.252  86.804  1.00 11.74           C
ATOM   2796  CG  LEU B 121      33.832   8.229  87.928  1.00 11.87           C
ATOM   2797  CD1 LEU B 121      34.554   7.817  89.192  1.00 10.26           C
ATOM   2798  CD2 LEU B 121      34.176   9.687  87.578  1.00 10.60           C
ATOM   2799  N   ASN B 122      33.417   5.211  84.378  1.00 12.67           N
ATOM   2800  CA  ASN B 122      33.703   4.286  83.273  1.00 13.55           C
ATOM   2801  C   ASN B 122      33.261   4.811  81.909  1.00 13.32           C
ATOM   2802  O   ASN B 122      33.982   4.675  80.932  1.00 13.42           O
ATOM   2803  CB  ASN B 122      33.058   2.920  83.527  1.00 14.53           C
ATOM   2804  CG  ASN B 122      33.879   2.048  84.471  1.00 16.39           C
ATOM   2805  OD1 ASN B 122      33.495   0.913  84.780  1.00 18.52           O
ATOM   2806  ND2 ASN B 122      35.016   2.563  84.916  1.00 15.66           N
ATOM   2807  N   TRP B 123      32.077   5.415  81.853  1.00 13.17           N
ATOM   2808  CA  TRP B 123      31.615   6.080  80.638  1.00 13.35           C
ATOM   2809  C   TRP B 123      32.543   7.216  80.210  1.00 13.88           C
ATOM   2810  O   TRP B 123      32.834   7.347  79.023  1.00 14.68           O
ATOM   2811  CB  TRP B 123      30.181   6.593  80.816  1.00 12.87           C
ATOM   2812  CG  TRP B 123      29.177   5.480  81.010  1.00 12.55           C
ATOM   2813  CD1 TRP B 123      29.295   4.190  80.576  1.00 12.21           C
ATOM   2814  NE1 TRP B 123      28.189   3.462  80.941  1.00 13.70           N
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FIG. 5UU

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ATOM   2815  CE2 TRP B 123      27.330   4.274  81.634  1.00 12.77           C
ATOM   2816  CD2 TRP B 123      27.924   5.558  81.697  1.00 12.01           C
ATOM   2817  CE3 TRP B 123      27.235   6.585  82.365  1.00 11.73           C
ATOM   2818  CZ3 TRP B 123      25.999   6.304  82.935  1.00 12.50           C
ATOM   2819  CH2 TRP B 123      25.435   5.018  82.849  1.00 13.43           C
ATOM   2820  CZ2 TRP B 123      26.087   3.989  82.201  1.00 12.97           C
ATOM   2821  N   CYS B 124      33.008   8.024  81.170  1.00 14.31           N
ATOM   2822  CA  CYS B 124      33.850   9.186  80.864  1.00 14.56           C
ATOM   2823  C   CYS B 124      35.177   8.737  80.259  1.00 14.32           C
ATOM   2824  O   CYS B 124      35.694   9.373  79.331  1.00 14.44           O
ATOM   2825  CB  CYS B 124      34.130  10.030  82.109  1.00 14.44           C
ATOM   2826  SG  CYS B 124      32.699  10.768  82.912  1.00 17.76           S
ATOM   2827  N   VAL B 125      35.723   7.652  80.806  1.00 13.63           N
ATOM   2828  CA  VAL B 125      36.933   7.013  80.277  1.00 13.57           C
ATOM   2829  C   VAL B 125      36.741   6.584  78.818  1.00 13.48           C
ATOM   2830  O   VAL B 125      37.554   6.906  77.940  1.00 13.24           O
ATOM   2831  CB  VAL B 125      37.331   5.773  81.127  1.00 13.46           C
ATOM   2832  CG1 VAL B 125      38.524   5.042  80.506  1.00 12.62           C
ATOM   2833  CG2 VAL B 125      37.656   6.189  82.572  1.00 13.17           C
ATOM   2834  N   GLN B 126      35.644   5.872  78.579  1.00 12.88           N
ATOM   2835  CA  GLN B 126      35.363   5.273  77.290  1.00 12.38           C
ATOM   2836  C   GLN B 126      35.129   6.332  76.223  1.00 12.46           C
ATOM   2837  O   GLN B 126      35.630   6.211  75.108  1.00 11.87           O
ATOM   2838  CB  GLN B 126      34.150   4.361  77.410  1.00 12.65           C
ATOM   2839  CG  GLN B 126      34.411   3.119  78.276  1.00 13.58           C
ATOM   2840  CD  GLN B 126      33.153   2.298  78.502  1.00 14.00           C
ATOM   2841  OE1 GLN B 126      32.187   2.382  77.720  1.00 13.77           O
ATOM   2842  NE2 GLN B 126      33.153   1.508  79.565  1.00 12.78           N
ATOM   2843  N   ILE B 127      34.367   7.372  76.570  1.00 11.33           N
ATOM   2844  CA  ILE B 127      34.153   8.458  75.642  1.00 10.94           C
ATOM   2845  C   ILE B 127      35.494   9.127  75.323  1.00 10.87           C
ATOM   2846  O   ILE B 127      35.782   9.391  74.153  1.00 10.42           O
ATOM   2847  CB  ILE B 127      33.097   9.452  76.180  1.00 10.86           C
ATOM   2848  CG1 ILE B 127      31.713   8.782  76.220  1.00  9.89           C
ATOM   2849  CD1 ILE B 127      30.797   9.311  77.320  1.00  8.13           C
ATOM   2850  CG2 ILE B 127      33.027  10.678  75.303  1.00 11.51           C
ATOM   2851  N   ALA B 128      36.317   9.356  76.353  1.00 10.62           N
ATOM   2852  CA  ALA B 128      37.653   9.929  76.165  1.00 11.48           C
ATOM   2853  C   ALA B 128      38.542   9.041  75.283  1.00 11.99           C
ATOM   2854  O   ALA B 128      39.309   9.554  74.474  1.00 11.95           O
ATOM   2855  CB  ALA B 128      38.332  10.201  77.508  1.00 10.96           C
ATOM   2856  N   LYS B 129      38.429   7.720  75.448  1.00 12.74           N
ATOM   2857  CA  LYS B 129      39.118   6.760  74.589  1.00 14.11           C
ATOM   2858  C   LYS B 129      38.634   6.859  73.141  1.00 14.67           C
ATOM   2859  O   LYS B 129      39.446   6.924  72.207  1.00 14.41           O
ATOM   2860  CB  LYS B 129      38.920   5.337  75.101  1.00 14.55           C
ATOM   2861  CG  LYS B 129      39.789   4.989  76.285  1.00 15.79           C
ATOM   2862  CD  LYS B 129      39.633   3.531  76.668  1.00 17.46           C
ATOM   2863  CE  LYS B 129      40.681   3.153  77.693  1.00 18.76           C
ATOM   2864  NZ  LYS B 129      40.137   2.204  78.705  1.00 21.51           N
ATOM   2865  N   GLY B 130      37.313   6.884  72.960  1.00 14.43           N
ATOM   2866  CA  GLY B 130      36.737   7.005  71.629  1.00 15.01           C
ATOM   2867  C   GLY B 130      37.220   8.250  70.901  1.00 14.80           C
ATOM   2868  O   GLY B 130      37.609   8.198  69.741  1.00 15.09           O
ATOM   2869  N   MET B 131      37.211   9.369  71.612  1.00 15.03           N
ATOM   2870  CA  MET B 131      37.609  10.673  71.075  1.00 14.67           C
ATOM   2871  C   MET B 131      39.104  10.782  70.773  1.00 14.50           C
ATOM   2872  O   MET B 131      39.495  11.451  69.821  1.00 13.93           O
ATOM   2873  CB  MET B 131      37.208  11.774  72.065  1.00 14.52           C
ATOM   2874  CG  MET B 131      35.717  12.074  72.121  1.00 13.78           C
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FIG. 5VV

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ATOM   2875  SD  MET B 131      34.940  12.339  70.502  1.00 14.79           S
ATOM   2876  CE  MET B 131      35.858  13.687  69.878  1.00 16.01           C
ATOM   2877  N   ASN B 132      39.919  10.125  71.599  1.00 15.17           N
ATOM   2878  CA  ASN B 132      41.367  10.057  71.420  1.00 15.77           C
ATOM   2879  C   ASN B 132      41.741   9.276  70.173  1.00 16.20           C
ATOM   2880  O   ASN B 132      42.738   9.594  69.510  1.00 16.12           O
ATOM   2881  CB  ASN B 132      42.038   9.428  72.656  1.00 15.64           C
ATOM   2882  CG  ASN B 132      43.550   9.258  72.495  1.00 16.46           C
ATOM   2883  OD1 ASN B 132      44.280  10.222  72.251  1.00 16.30           O
ATOM   2884  ND2 ASN B 132      44.023   8.020  72.638  1.00 17.97           N
ATOM   2885  N   TYR B 133      40.948   8.247  69.869  1.00 16.69           N
ATOM   2886  CA  TYR B 133      41.097   7.510  68.614  1.00 17.96           C
ATOM   2887  C   TYR B 133      40.856   8.438  67.432  1.00 18.55           C
ATOM   2888  O   TYR B 133      41.637   8.458  66.483  1.00 18.74           O
ATOM   2889  CB  TYR B 133      40.140   6.321  68.547  1.00 17.70           C
ATOM   2890  CG  TYR B 133      40.045   5.704  67.171  1.00 18.47           C
ATOM   2891  CD1 TYR B 133      40.994   4.769  66.732  1.00 18.22           C
ATOM   2892  CE1 TYR B 133      40.906   4.200  65.464  1.00 17.82           C
ATOM   2893  CZ  TYR B 133      39.860   4.560  64.624  1.00 17.71           C
ATOM   2894  OH  TYR B 133      39.766   4.007  63.377  1.00 18.07           O
ATOM   2895  CE2 TYR B 133      38.918   5.483  65.025  1.00 17.89           C
ATOM   2896  CD2 TYR B 133      39.011   6.053  66.300  1.00 18.32           C
ATOM   2897  N   LEU B 134      39.773   9.210  67.504  1.00 19.23           N
ATOM   2898  CA  LEU B 134      39.438  10.159  66.449  1.00 19.76           C
ATOM   2899  C   LEU B 134      40.540  11.195  66.282  1.00 19.69           C
ATOM   2900  O   LEU B 134      40.894  11.543  65.156  1.00 19.19           O
ATOM   2901  CB  LEU B 134      38.092  10.840  66.723  1.00 19.86           C
ATOM   2902  CG  LEU B 134      36.800  10.015  66.639  1.00 20.31           C
ATOM   2903  CD1 LEU B 134      35.606  10.936  66.854  1.00 21.10           C
ATOM   2904  CD2 LEU B 134      36.656   9.272  65.318  1.00 20.78           C
ATOM   2905  N   GLU B 135      41.091  11.672  67.402  1.00 20.10           N
ATOM   2906  CA  GLU B 135      42.221  12.598  67.347  1.00 20.27           C
ATOM   2907  C   GLU B 135      43.437  11.965  66.678  1.00 20.05           C
ATOM   2908  O   GLU B 135      44.058  12.592  65.832  1.00 20.59           O
ATOM   2909  CB  GLU B 135      42.587  13.161  68.721  1.00 20.54           C
ATOM   2910  CG  GLU B 135      43.786  14.109  68.667  1.00 21.54           C
ATOM   2911  CD  GLU B 135      44.085  14.812  69.982  1.00 22.97           C
ATOM   2912  OE1 GLU B 135      43.412  14.526  71.000  1.00 22.28           O
ATOM   2913  OE2 GLU B 135      45.009  15.656  69.990  1.00 22.62           O
ATOM   2914  N   ASP B 136      43.756  10.726  67.046  1.00 19.95           N
ATOM   2915  CA  ASP B 136      44.869   9.997  66.449  1.00 20.02           C
ATOM   2916  C   ASP B 136      44.740   9.871  64.941  1.00 20.16           C
ATOM   2917  O   ASP B 136      45.741   9.952  64.226  1.00 20.42           O
ATOM   2918  CB  ASP B 136      44.994   8.608  67.050  1.00 20.30           C
ATOM   2919  CG  ASP B 136      45.727   8.607  68.368  1.00 20.85           C
ATOM   2920  OD1 ASP B 136      45.631   7.578  69.065  1.00 21.59           O
ATOM   2921  OD2 ASP B 136      46.418   9.567  68.785  1.00 20.39           O
ATOM   2922  N   ARG B 137      43.503   9.679  64.479  1.00 20.00           N
ATOM   2923  CA  ARG B 137      43.161   9.639  63.058  1.00 19.04           C
ATOM   2924  C   ARG B 137      43.007  11.041  62.468  1.00 18.83           C
ATOM   2925  O   ARG B 137      42.636  11.196  61.298  1.00 18.70           O
ATOM   2926  CB  ARG B 137      41.860   8.859  62.862  1.00 19.57           C
ATOM   2927  CG  ARG B 137      42.013   7.337  62.920  1.00 21.49           C
ATOM   2928  CD  ARG B 137      42.519   6.715  61.616  1.00 24.05           C
ATOM   2929  NE  ARG B 137      41.420   6.330  60.730  1.00 27.27           N
ATOM   2930  CZ  ARG B 137      40.949   7.083  59.745  1.00 28.83           C
ATOM   2931  NH1 ARG B 137      41.473   8.278  59.498  1.00 32.73           N
ATOM   2932  NH2 ARG B 137      39.960   6.643  58.991  1.00 28.41           N
ATOM   2933  N   ARG B 138      43.285  12.061  63.280  1.00 18.28           N
ATOM   2934  CA  ARG B 138      43.136  13.457  62.866  1.00 18.11           C
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FIG. 5WW

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ATOM   2935  C   ARG B 138      41.753  13.696  62.265  1.00 18.18           C
ATOM   2936  O   ARG B 138      41.599  14.375  61.245  1.00 18.83           O
ATOM   2937  CB  ARG B 138      44.260  13.886  61.907  1.00 18.64           C
ATOM   2938  N   LEU B 139      40.748  13.112  62.909  1.00 17.18           N
ATOM   2939  CA  LEU B 139      39.364  13.363  62.564  1.00 16.85           C
ATOM   2940  C   LEU B 139      38.742  14.200  63.695  1.00 16.74           C
ATOM   2941  O   LEU B 139      38.939  13.915  64.888  1.00 16.86           O
ATOM   2942  CB  LEU B 139      38.606  12.042  62.343  1.00 16.37           C
ATOM   2943  CG  LEU B 139      39.128  11.058  61.275  1.00 16.51           C
ATOM   2944  CD1 LEU B 139      38.504   9.657  61.383  1.00 13.92           C
ATOM   2945  CD2 LEU B 139      38.946  11.626  59.857  1.00 17.30           C
ATOM   2946  N   VAL B 140      38.023  15.247  63.317  1.00 16.28           N
ATOM   2947  CA  VAL B 140      37.331  16.094  64.280  1.00 16.21           C
ATOM   2948  C   VAL B 140      35.846  15.702  64.276  1.00 16.75           C
ATOM   2949  O   VAL B 140      35.207  15.662  63.217  1.00 16.46           O
ATOM   2950  CB  VAL B 140      37.542  17.598  63.949  1.00 16.72           C
ATOM   2951  CG1 VAL B 140      36.636  18.499  64.817  1.00 16.04           C
ATOM   2952  CG2 VAL B 140      39.055  17.998  64.089  1.00 14.20           C
ATOM   2953  N   HIS B 141      35.305  15.387  65.453  1.00 17.21           N
ATOM   2954  CA  HIS B 141      33.905  14.984  65.552  1.00 17.28           C
ATOM   2955  C   HIS B 141      32.964  16.159  65.378  1.00 17.55           C
ATOM   2956  O   HIS B 141      32.042  16.084  64.563  1.00 17.43           O
ATOM   2957  CB  HIS B 141      33.598  14.248  66.860  1.00 17.34           C
ATOM   2958  CG  HIS B 141      32.215  13.672  66.905  1.00 17.38           C
ATOM   2959  ND1 HIS B 141      31.081  14.458  66.950  1.00 17.18           N
ATOM   2960  CE1 HIS B 141      30.011  13.683  66.969  1.00 17.34           C
ATOM   2961  NE2 HIS B 141      30.408  12.424  66.933  1.00 16.82           N
ATOM   2962  CD2 HIS B 141      31.781  12.390  66.885  1.00 17.27           C
ATOM   2963  N   ARG B 142      33.171  17.214  66.175  1.00 17.67           N
ATOM   2964  CA  ARG B 142      32.470  18.491  66.000  1.00 18.29           C
ATOM   2965  C   ARG B 142      31.061  18.558  66.626  1.00 18.17           C
ATOM   2966  O   ARG B 142      30.499  19.643  66.791  1.00 18.43           O
ATOM   2967  CB  ARG B 142      32.468  18.854  64.506  1.00 19.02           C
ATOM   2968  CG  ARG B 142      31.723  20.091  64.097  1.00 21.75           C
ATOM   2969  CD  ARG B 142      31.557  20.214  62.586  1.00 25.73           C
ATOM   2970  NE  ARG B 142      32.837  20.240  61.876  1.00 27.56           N
ATOM   2971  CZ  ARG B 142      33.180  21.185  61.008  1.00 29.58           C
ATOM   2972  NH1 ARG B 142      32.337  22.187  60.744  1.00 30.12           N
ATOM   2973  NH2 ARG B 142      34.360  21.135  60.402  1.00 28.92           N
ATOM   2974  N   ASP B 143      30.495  17.414  66.996  1.00 17.99           N
ATOM   2975  CA  ASP B 143      29.174  17.404  67.624  1.00 18.25           C
ATOM   2976  C   ASP B 143      29.074  16.409  68.781  1.00 17.20           C
ATOM   2977  O   ASP B 143      28.086  15.690  68.902  1.00 16.71           O
ATOM   2978  CB  ASP B 143      28.082  17.135  66.574  1.00 19.03           C
ATOM   2979  CG  ASP B 143      26.679  17.479  67.062  1.00 20.93           C
ATOM   2980  OD1 ASP B 143      26.511  18.036  68.179  1.00 20.76           O
ATOM   2981  OD2 ASP B 143      25.665  17.228  66.365  1.00 24.70           O
ATOM   2982  N   LEU B 144      30.093  16.383  69.637  1.00 16.54           N
ATOM   2983  CA  LEU B 144      30.066  15.517  70.814  1.00 15.72           C
ATOM   2984  C   LEU B 144      29.096  16.081  71.866  1.00 15.06           C
ATOM   2985  O   LEU B 144      29.178  17.257  72.243  1.00 14.74           O
ATOM   2986  CB  LEU B 144      31.477  15.329  71.394  1.00 15.69           C
ATOM   2987  CG  LEU B 144      31.643  14.508  72.680  1.00 16.01           C
ATOM   2988  CD1 LEU B 144      31.310  13.046  72.448  1.00 16.11           C
ATOM   2989  CD2 LEU B 144      33.061  14.634  73.200  1.00 16.80           C
ATOM   2990  N   ALA B 145      28.168  15.226  72.292  1.00 14.04           N
ATOM   2991  CA  ALA B 145      27.172  15.517  73.332  1.00 13.13           C
ATOM   2992  C   ALA B 145      26.646  14.179  73.840  1.00 12.94           C
ATOM   2993  O   ALA B 145      26.835  13.149  73.183  1.00 12.84           O
ATOM   2994  CB  ALA B 145      26.024  16.361  72.775  1.00 12.20           C
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FIG. 5XX

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ATOM   2995  N   ALA B 146      25.982  14.183  74.996  1.00 12.87           N
ATOM   2996  CA  ALA B 146      25.345  12.969  75.496  1.00 13.05           C
ATOM   2997  C   ALA B 146      24.318  12.367  74.514  1.00 13.32           C
ATOM   2998  O   ALA B 146      24.165  11.147  74.455  1.00 13.18           O
ATOM   2999  CB  ALA B 146      24.723  13.205  76.867  1.00 12.55           C
ATOM   3000  N   ARG B 147      23.620  13.215  73.754  1.00 13.75           N
ATOM   3001  CA  ARG B 147      22.671  12.742  72.730  1.00 15.11           C
ATOM   3002  C   ARG B 147      23.342  11.909  71.642  1.00 15.27           C
ATOM   3003  O   ARG B 147      22.711  11.061  71.022  1.00 16.36           O
ATOM   3004  CB  ARG B 147      21.888  13.907  72.098  1.00 15.25           C
ATOM   3005  CG  ARG B 147      22.692  14.779  71.128  1.00 16.01           C
ATOM   3006  CD  ARG B 147      21.951  16.033  70.657  1.00 15.00           C
ATOM   3007  NE  ARG B 147      22.881  17.005  70.105  1.00 15.92           N
ATOM   3008  CZ  ARG B 147      23.429  18.008  70.792  1.00 15.52           C
ATOM   3009  NH1 ARG B 147      23.138  18.207  72.070  1.00 14.10           N
ATOM   3010  NH2 ARG B 147      24.266  18.827  70.184  1.00 17.23           N
ATOM   3011  N   ASN B 148      24.633  12.139  71.434  1.00 16.22           N
ATOM   3012  CA  ASN B 148      25.398  11.423  70.417  1.00 16.00           C
ATOM   3013  C   ASN B 148      26.327  10.372  70.993  1.00 15.46           C
ATOM   3014  O   ASN B 148      27.364  10.065  70.405  1.00 14.79           O
ATOM   3015  CB  ASN B 148      26.155  12.421  69.539  1.00 16.57           C
ATOM   3016  CG  ASN B 148      25.218  13.279  68.717  1.00 17.29           C
ATOM   3017  OD1 ASN B 148      25.352  14.499  68.674  1.00 18.79           O
ATOM   3018  ND2 ASN B 148      24.247  12.641  68.072  1.00 17.30           N
ATOM   3019  N   VAL B 149      25.952   9.839  72.158  1.00 15.09           N
ATOM   3020  CA  VAL B 149      26.628   8.675  72.729  1.00 14.53           C
ATOM   3021  C   VAL B 149      25.581   7.595  72.925  1.00 14.66           C
ATOM   3022  O   VAL B 149      24.496   7.859  73.436  1.00 15.29           O
ATOM   3023  CB  VAL B 149      27.372   8.995  74.056  1.00 14.48           C
ATOM   3024  CG1 VAL B 149      28.010   7.749  74.644  1.00 14.28           C
ATOM   3025  CG2 VAL B 149      28.449  10.061  73.842  1.00 13.23           C
ATOM   3026  N   LEU B 150      25.896   6.386  72.479  1.00 15.22           N
ATOM   3027  CA  LEU B 150      24.958   5.270  72.537  1.00 14.96           C
ATOM   3028  C   LEU B 150      25.418   4.214  73.514  1.00 15.33           C
ATOM   3029  O   LEU B 150      26.604   4.108  73.816  1.00 15.82           O
ATOM   3030  CB  LEU B 150      24.756   4.654  71.150  1.00 13.86           C
ATOM   3031  CG  LEU B 150      24.285   5.582  70.025  1.00 14.68           C
ATOM   3032  CD1 LEU B 150      24.130   4.811  68.707  1.00 13.79           C
ATOM   3033  CD2 LEU B 150      22.992   6.348  70.375  1.00 13.31           C
ATOM   3034  N   VAL B 151      24.460   3.423  73.982  1.00 16.46           N
ATOM   3035  CA  VAL B 151      24.675   2.401  74.999  1.00 17.20           C
ATOM   3036  C   VAL B 151      24.583   1.004  74.372  1.00 17.68           C
ATOM   3037  O   VAL B 151      23.496   0.543  74.042  1.00 18.67           O
ATOM   3038  CB  VAL B 151      23.629   2.540  76.139  1.00 17.11           C
ATOM   3039  CG1 VAL B 151      23.949   1.615  77.315  1.00 18.23           C
ATOM   3040  CG2 VAL B 151      23.528   3.980  76.619  1.00 16.48           C
ATOM   3041  N   LYS B 152      25.731   0.352  74.196  1.00 18.57           N
ATOM   3042  CA  LYS B 152      25.800  -1.036  73.734  1.00 18.95           C
ATOM   3043  C   LYS B 152      25.396  -1.967  74.868  1.00 19.76           C
ATOM   3044  O   LYS B 152      24.471  -2.768  74.730  1.00 19.89           O
ATOM   3045  CB  LYS B 152      27.217  -1.365  73.252  1.00 19.11           C
ATOM   3046  CG  LYS B 152      27.360  -2.726  72.575  1.00 19.33           C
ATOM   3047  N   THR B 153      26.117  -1.873  75.983  1.00 20.44           N
ATOM   3048  CA  THR B 153      25.679  -2.475  77.244  1.00 21.72           C
ATOM   3049  C   THR B 153      25.777  -1.359  78.262  1.00 21.90           C
ATOM   3050  O   THR B 153      26.413  -0.348  77.981  1.00 22.30           O
ATOM   3051  CB  THR B 153      26.555  -3.692  77.659  1.00 21.38           C
ATOM   3052  OG1 THR B 153      27.840  -3.236  78.095  1.00 21.96           O
ATOM   3053  CG2 THR B 153      26.870  -4.593  76.455  1.00 20.61           C
ATOM   3054  N   PRO B 154      25.123  -1.506  79.413  1.00 22.82           N
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FIG. 5YY

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ATOM   3055  CA  PRO B 154      25.261  -0.537  80.508  1.00 23.06           C
ATOM   3056  C   PRO B 154      26.712  -0.201  80.870  1.00 23.28           C
ATOM   3057  O   PRO B 154      26.952   0.855  81.442  1.00 23.52           O
ATOM   3058  CB  PRO B 154      24.567  -1.246  81.670  1.00 23.42           C
ATOM   3059  CG  PRO B 154      23.496  -2.025  81.012  1.00 22.85           C
ATOM   3060  CD  PRO B 154      24.157  -2.569  79.757  1.00 23.16           C
ATOM   3061  N   GLN B 155      27.662  -1.065  80.536  1.00 23.65           N
ATOM   3062  CA  GLN B 155      29.065  -0.768  80.825  1.00 24.53           C
ATOM   3063  C   GLN B 155      29.938  -0.624  79.571  1.00 23.64           C
ATOM   3064  O   GLN B 155      31.161  -0.693  79.648  1.00 24.23           O
ATOM   3065  CB  GLN B 155      29.652  -1.797  81.802  1.00 25.66           C
ATOM   3066  CG  GLN B 155      29.604  -3.224  81.294  1.00 28.59           C
ATOM   3067  CD  GLN B 155      28.726  -4.107  82.147  1.00 31.84           C
ATOM   3068  OE1 GLN B 155      27.497  -4.115  81.999  1.00 34.01           O
ATOM   3069  NE2 GLN B 155      29.347  -4.860  83.041  1.00 32.93           N
ATOM   3070  N   HIS B 156      29.301  -0.400  78.426  1.00 22.82           N
ATOM   3071  CA  HIS B 156      30.010  -0.202  77.169  1.00 22.02           C
ATOM   3072  C   HIS B 156      29.281   0.829  76.307  1.00 21.21           C
ATOM   3073  O   HIS B 156      28.208   0.560  75.788  1.00 21.40           O
ATOM   3074  CB  HIS B 156      30.182  -1.537  76.428  1.00 21.76           C
ATOM   3075  CG  HIS B 156      30.984  -1.442  75.162  1.00 22.91           C
ATOM   3076  ND1 HIS B 156      31.532  -0.263  74.705  1.00 22.28           N
ATOM   3077  CE1 HIS B 156      32.168  -0.483  73.570  1.00 21.49           C
ATOM   3078  NE2 HIS B 156      32.059  -1.764  73.273  1.00 22.52           N
ATOM   3079  CD2 HIS B 156      31.322  -2.387  74.251  1.00 23.10           C
ATOM   3080  N   VAL B 157      29.879   2.011  76.160  1.00 20.75           N
ATOM   3081  CA  VAL B 157      29.285   3.081  75.362  1.00 19.33           C
ATOM   3082  C   VAL B 157      30.135   3.428  74.141  1.00 19.44           C
ATOM   3083  O   VAL B 157      31.324   3.095  74.083  1.00 19.26           O
ATOM   3084  CB  VAL B 157      28.955   4.358  76.209  1.00 19.85           C
ATOM   3085  CG1 VAL B 157      27.941   4.029  77.327  1.00 18.01           C
ATOM   3086  CG2 VAL B 157      30.230   5.038  76.763  1.00 17.58           C
ATOM   3087  N   LYS B 158      29.506   4.103  73.177  1.00 19.20           N
ATOM   3088  CA  LYS B 158      30.088   4.375  71.864  1.00 18.62           C
ATOM   3089  C   LYS B 158      29.623   5.725  71.326  1.00 18.34           C
ATOM   3090  O   LYS B 158      28.429   6.060  71.392  1.00 17.75           O
ATOM   3091  CB  LYS B 158      29.646   3.292  70.876  1.00 18.95           C
ATOM   3092  CG  LYS B 158      30.759   2.430  70.330  1.00 20.37           C
ATOM   3093  CD  LYS B 158      30.330   0.978  70.248  1.00 21.15           C
ATOM   3094  CE  LYS B 158      30.359   0.490  68.827  1.00 22.24           C
ATOM   3095  NZ  LYS B 158      31.698  -0.008  68.384  1.00 24.66           N
ATOM   3096  N   ILE B 159      30.562   6.481  70.770  1.00 17.82           N
ATOM   3097  CA  ILE B 159      30.259   7.758  70.147  1.00 18.47           C
ATOM   3098  C   ILE B 159      29.677   7.522  68.761  1.00 18.97           C
ATOM   3099  O   ILE B 159      30.229   6.770  67.950  1.00 19.06           O
ATOM   3100  CB  ILE B 159      31.524   8.654  70.082  1.00 18.12           C
ATOM   3101  CG1 ILE B 159      31.978   9.028  71.491  1.00 18.56           C
ATOM   3102  CD1 ILE B 159      33.479   8.986  71.658  1.00 21.02           C
ATOM   3103  CG2 ILE B 159      31.267   9.926  69.289  1.00 16.71           C
ATOM   3104  N   THR B 160      28.556   8.171  68.491  1.00 19.88           N
ATOM   3105  CA  THR B 160      27.917   8.051  67.193  1.00 20.98           C
ATOM   3106  C   THR B 160      27.820   9.407  66.487  1.00 22.04           C
ATOM   3107  O   THR B 160      28.242  10.431  67.038  1.00 21.56           O
ATOM   3108  CB  THR B 160      26.550   7.358  67.345  1.00 20.81           C
ATOM   3109  OG1 THR B 160      26.034   7.011  66.055  1.00 21.04           O
ATOM   3110  CG2 THR B 160      25.507   8.315  67.906  1.00 21.77           C
ATOM   3111  N   ASP B 161      27.312   9.380  65.251  1.00 23.57           N
ATOM   3112  CA  ASP B 161      26.982  10.564  64.452  1.00 25.46           C
ATOM   3113  C   ASP B 161      28.185  11.368  63.951  1.00 25.96           C
ATOM   3114  O   ASP B 161      28.025  12.494  63.468  1.00 25.51           O
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FIG. 5ZZ

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ATOM   3115  CB  ASP B 161      25.965  11.474  65.178  1.00 25.64           C
ATOM   3116  CG  ASP B 161      24.518  11.006  64.995  1.00 27.57           C
ATOM   3117  OD1 ASP B 161      24.306   9.900  64.456  1.00 27.77           O
ATOM   3118  OD2 ASP B 161      23.523  11.676  65.359  1.00 28.44           O
ATOM   3119  N   PHE B 162      29.382  10.804  64.044  1.00 27.00           N
ATOM   3120  CA  PHE B 162      30.544  11.501  63.497  1.00 28.97           C
ATOM   3121  C   PHE B 162      30.435  11.591  61.968  1.00 29.91           C
ATOM   3122  O   PHE B 162      30.004  10.635  61.304  1.00 29.51           O
ATOM   3123  CB  PHE B 162      31.856  10.854  63.947  1.00 29.25           C
ATOM   3124  CG  PHE B 162      32.403   9.882  62.975  1.00 30.69           C
ATOM   3125  CD1 PHE B 162      31.964   8.564  62.983  1.00 32.77           C
ATOM   3126  CE1 PHE B 162      32.443   7.661  62.069  1.00 32.93           C
ATOM   3127  CZ  PHE B 162      33.389   8.085  61.139  1.00 33.64           C
ATOM   3128  CE2 PHE B 162      33.823   9.403  61.114  1.00 31.87           C
ATOM   3129  CD2 PHE B 162      33.334  10.286  62.029  1.00 31.34           C
ATOM   3130  N   GLY B 163      30.805  12.749  61.427  1.00 30.91           N
ATOM   3131  CA  GLY B 163      30.627  13.030  60.014  1.00 33.09           C
ATOM   3132  C   GLY B 163      29.326  13.741  59.666  1.00 34.48           C
ATOM   3133  O   GLY B 163      29.259  14.456  58.661  1.00 34.96           O
ATOM   3134  N   LEU B 164      28.301  13.559  60.498  1.00 36.01           N
ATOM   3135  CA  LEU B 164      26.950  14.040  60.201  1.00 37.70           C
ATOM   3136  C   LEU B 164      26.807  15.557  60.302  1.00 39.33           C
ATOM   3137  O   LEU B 164      25.954  16.152  59.642  1.00 39.00           O
ATOM   3138  CB  LEU B 164      25.926  13.344  61.104  1.00 37.52           C
ATOM   3139  CG  LEU B 164      24.988  12.306  60.470  1.00 37.49           C
ATOM   3140  CD1 LEU B 164      25.705  11.428  59.448  1.00 37.55           C
ATOM   3141  CD2 LEU B 164      24.338  11.452  61.533  1.00 36.19           C
ATOM   3142  N   ALA B 165      27.640  16.172  61.136  1.00 41.57           N
ATOM   3143  CA  ALA B 165      27.680  17.626  61.263  1.00 43.70           C
ATOM   3144  C   ALA B 165      28.175  18.244  59.961  1.00 44.90           C
ATOM   3145  O   ALA B 165      27.652  19.264  59.513  1.00 45.48           O
ATOM   3146  CB  ALA B 165      28.576  18.038  62.431  1.00 43.57           C
ATOM   3147  N   LYS B 166      29.178  17.606  59.360  1.00 46.41           N
ATOM   3148  CA  LYS B 166      29.720  18.026  58.075  1.00 47.53           C
ATOM   3149  C   LYS B 166      28.697  17.814  56.972  1.00 48.33           C
ATOM   3150  O   LYS B 166      28.476  18.706  56.149  1.00 49.23           O
ATOM   3151  CB  LYS B 166      30.999  17.248  57.753  1.00 47.79           C
ATOM   3152  N   LEU B 167      28.073  16.635  56.964  1.00 48.68           N
ATOM   3153  CA  LEU B 167      27.097  16.284  55.941  1.00 48.79           C
ATOM   3154  C   LEU B 167      25.858  17.172  55.989  1.00 49.10           C
ATOM   3155  O   LEU B 167      25.453  17.733  54.967  1.00 49.24           O
ATOM   3156  CB  LEU B 167      26.701  14.809  56.056  1.00 49.03           C
ATOM   3157  CG  LEU B 167      27.548  13.783  55.293  1.00 49.18           C
ATOM   3158  CD1 LEU B 167      26.913  12.395  55.361  1.00 48.70           C
ATOM   3159  CD2 LEU B 167      27.771  14.203  53.837  1.00 49.44           C
ATOM   3160  N   LEU B 168      25.271  17.313  57.176  1.00 49.06           N
ATOM   3161  CA  LEU B 168      24.001  18.024  57.324  1.00 49.05           C
ATOM   3162  C   LEU B 168      24.163  19.409  57.948  1.00 49.23           C
ATOM   3163  O   LEU B 168      25.140  20.115  57.683  1.00 49.32           O
ATOM   3164  CB  LEU B 168      23.007  17.185  58.136  1.00 49.07           C
ATOM   3165  CG  LEU B 168      22.897  15.681  57.853  1.00 48.90           C
ATOM   3166  CD1 LEU B 168      21.821  15.067  58.719  1.00 49.15           C
ATOM   3167  CD2 LEU B 168      22.615  15.391  56.383  1.00 49.34           C
ATOM   3168  N   VAL B 182      24.642  25.135  65.216  1.00 30.57           N
ATOM   3169  CA  VAL B 182      23.318  24.973  65.813  1.00 30.48           C
ATOM   3170  C   VAL B 182      23.358  24.536  67.286  1.00 29.89           C
ATOM   3171  O   VAL B 182      22.609  25.090  68.102  1.00 31.11           O
ATOM   3172  CB  VAL B 182      22.422  24.007  65.000  1.00 30.78           C
ATOM   3173  N   PRO B 183      24.217  23.572  67.641  1.00 28.74           N
ATOM   3174  CA  PRO B 183      24.313  23.126  69.034  1.00 26.76           C
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FIG. 5AAA

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ATOM   3175  C   PRO B 183      25.275  24.027  69.802  1.00 24.78           C
ATOM   3176  O   PRO B 183      26.283  23.569  70.355  1.00 23.84           O
ATOM   3177  CB  PRO B 183      24.866  21.707  68.905  1.00 27.33           C
ATOM   3178  CG  PRO B 183      25.709  21.733  67.648  1.00 28.32           C
ATOM   3179  CD  PRO B 183      25.170  22.844  66.776  1.00 28.73           C
ATOM   3180  N   ILE B 184      24.934  25.313  69.830  1.00 22.44           N
ATOM   3181  CA  ILE B 184      25.755  26.352  70.446  1.00 20.73           C
ATOM   3182  C   ILE B 184      26.263  25.982  71.850  1.00 19.72           C
ATOM   3183  O   ILE B 184      27.400  26.301  72.203  1.00 19.10           O
ATOM   3184  CB  ILE B 184      24.975  27.706  70.465  1.00 20.48           C
ATOM   3185  CG1 ILE B 184      24.634  28.179  69.038  1.00 21.10           C
ATOM   3186  CD1 ILE B 184      25.821  28.262  68.097  1.00 21.14           C
ATOM   3187  CG2 ILE B 184      25.742  28.784  71.215  1.00 19.99           C
ATOM   3188  N   LYS B 185      25.430  25.294  72.630  1.00 18.51           N
ATOM   3189  CA  LYS B 185      25.724  25.044  74.046  1.00 17.63           C
ATOM   3190  C   LYS B 185      26.772  23.959  74.314  1.00 17.32           C
ATOM   3191  O   LYS B 185      27.221  23.790  75.450  1.00 17.41           O
ATOM   3192  CB  LYS B 185      24.433  24.765  74.817  1.00 17.72           C
ATOM   3193  CG  LYS B 185      23.580  26.002  75.013  1.00 16.63           C
ATOM   3194  CD  LYS B 185      22.196  25.655  75.491  1.00 15.05           C
ATOM   3195  CE  LYS B 185      21.315  26.885  75.523  1.00 13.12           C
ATOM   3196  NZ  LYS B 185      20.340  26.831  76.661  1.00 12.44           N
ATOM   3197  N   TRP B 186      27.170  23.240  73.265  1.00 17.19           N
ATOM   3198  CA  TRP B 186      28.212  22.218  73.370  1.00 16.56           C
ATOM   3199  C   TRP B 186      29.500  22.701  72.696  1.00 17.00           C
ATOM   3200  O   TRP B 186      30.542  22.049  72.777  1.00 16.89           O
ATOM   3201  CB  TRP B 186      27.735  20.894  72.752  1.00 15.17           C
ATOM   3202  CG  TRP B 186      26.875  20.100  73.683  1.00 13.57           C
ATOM   3203  CD1 TRP B 186      27.269  19.055  74.482  1.00 12.74           C
ATOM   3204  NE1 TRP B 186      26.201  18.591  75.214  1.00 11.84           N
ATOM   3205  CE2 TRP B 186      25.091  19.329  74.898  1.00 10.92           C
ATOM   3206  CD2 TRP B 186      25.478  20.282  73.928  1.00 10.84           C
ATOM   3207  CE3 TRP B 186      24.510  21.171  73.441  1.00 11.80           C
ATOM   3208  CZ3 TRP B 186      23.204  21.082  73.925  1.00 11.60           C
ATOM   3209  CH2 TRP B 186      22.850  20.117  74.878  1.00 11.91           C
ATOM   3210  CZ2 TRP B 186      23.780  19.232  75.379  1.00 12.23           C
ATOM   3211  N   MET B 187      29.417  23.846  72.027  1.00 17.15           N
ATOM   3212  CA  MET B 187      30.534  24.342  71.222  1.00 17.93           C
ATOM   3213  C   MET B 187      31.559  25.129  72.039  1.00 17.47           C
ATOM   3214  O   MET B 187      31.201  25.940  72.898  1.00 17.04           O
ATOM   3215  CB  MET B 187      30.030  25.195  70.054  1.00 18.13           C
ATOM   3216  CG  MET B 187      29.294  24.410  68.960  1.00 20.34           C
ATOM   3217  SD  MET B 187      28.350  25.493  67.822  1.00 23.46           S
ATOM   3218  CE  MET B 187      29.652  26.213  66.933  1.00 22.27           C
ATOM   3219  N   ALA B 188      32.836  24.862  71.769  1.00 17.52           N
ATOM   3220  CA  ALA B 188      33.933  25.698  72.256  1.00 17.56           C
ATOM   3221  C   ALA B 188      33.760  27.120  71.735  1.00 17.32           C
ATOM   3222  O   ALA B 188      33.158  27.316  70.677  1.00 17.45           O
ATOM   3223  CB  ALA B 188      35.246  25.129  71.796  1.00 17.47           C
ATOM   3224  N   LEU B 189      34.266  28.107  72.474  1.00 18.04           N
ATOM   3225  CA  LEU B 189      34.093  29.523  72.092  1.00 17.98           C
ATOM   3226  C   LEU B 189      34.634  29.852  70.697  1.00 18.25           C
ATOM   3227  O   LEU B 189      34.030  30.646  69.971  1.00 18.68           O
ATOM   3228  CB  LEU B 189      34.694  30.484  73.130  1.00 17.64           C
ATOM   3229  CG  LEU B 189      34.454  31.989  72.852  1.00 17.66           C
ATOM   3230  CD1 LEU B 189      32.978  32.404  72.987  1.00 14.66           C
ATOM   3231  CD2 LEU B 189      35.333  32.878  73.713  1.00 16.44           C
ATOM   3232  N   GLU B 190      35.758  29.235  70.326  1.00 17.93           N
ATOM   3233  CA  GLU B 190      36.374  29.452  69.013  1.00 17.93           C
ATOM   3234  C   GLU B 190      35.531  28.862  67.878  1.00 18.84           C
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FIG. 5BBB

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ATOM   3235  O   GLU B 190      35.630  29.291  66.721  1.00 18.21           O
ATOM   3236  CB  GLU B 190      37.816  28.917  68.981  1.00 17.55           C
ATOM   3237  CG  GLU B 190      37.946  27.399  69.036  1.00 15.77           C
ATOM   3238  CD  GLU B 190      38.074  26.860  70.443  1.00 14.66           C
ATOM   3239  OE1 GLU B 190      38.558  25.714  70.591  1.00 15.90           O
ATOM   3240  OE2 GLU B 190      37.682  27.557  71.401  1.00 13.45           O
ATOM   3241  N   SER B 191      34.685  27.892  68.229  1.00 19.59           N
ATOM   3242  CA  SER B 191      33.729  27.315  67.284  1.00 20.51           C
ATOM   3243  C   SER B 191      32.535  28.237  67.024  1.00 21.04           C
ATOM   3244  O   SER B 191      32.108  28.370  65.877  1.00 22.17           O
ATOM   3245  CB  SER B 191      33.251  25.946  67.769  1.00 20.44           C
ATOM   3246  OG  SER B 191      34.347  25.079  67.989  1.00 19.95           O
ATOM   3247  N   ILE B 192      31.996  28.864  68.073  1.00 20.89           N
ATOM   3248  CA  ILE B 192      30.862  29.775  67.917  1.00 21.01           C
ATOM   3249  C   ILE B 192      31.264  31.046  67.173  1.00 21.77           C
ATOM   3250  O   ILE B 192      30.579  31.476  66.246  1.00 21.72           O
ATOM   3251  CB  ILE B 192      30.235  30.178  69.277  1.00 20.75           C
ATOM   3252  CG1 ILE B 192      29.902  28.948  70.128  1.00 20.56           C
ATOM   3253  CD1 ILE B 192      29.511  29.265  71.554  1.00 20.43           C
ATOM   3254  CG2 ILE B 192      28.981  31.008  69.033  1.00 19.75           C
ATOM   3255  N   LEU B 193      32.372  31.647  67.601  1.00 21.81           N
ATOM   3256  CA  LEU B 193      32.801  32.922  67.062  1.00 22.13           C
ATOM   3257  C   LEU B 193      33.411  32.815  65.660  1.00 22.73           C
ATOM   3258  O   LEU B 193      33.131  33.655  64.804  1.00 23.38           O
ATOM   3259  CB  LEU B 193      33.760  33.617  68.034  1.00 21.79           C
ATOM   3260  CG  LEU B 193      33.213  34.093  69.392  1.00 20.95           C
ATOM   3261  CD1 LEU B 193      34.338  34.710  70.241  1.00 20.07           C
ATOM   3262  CD2 LEU B 193      32.051  35.078  69.236  1.00 20.51           C
ATOM   3263  N   HIS B 194      34.212  31.777  65.415  1.00 23.10           N
ATOM   3264  CA  HIS B 194      35.023  31.709  64.201  1.00 23.16           C
ATOM   3265  C   HIS B 194      34.867  30.436  63.390  1.00 24.53           C
ATOM   3266  O   HIS B 194      35.592  30.231  62.409  1.00 25.58           O
ATOM   3267  CB  HIS B 194      36.504  31.882  64.546  1.00 22.41           C
ATOM   3268  CG  HIS B 194      36.782  32.994  65.507  1.00 20.63           C
ATOM   3269  ND1 HIS B 194      37.541  32.818  66.642  1.00 20.09           N
ATOM   3270  CE1 HIS B 194      37.622  33.964  67.298  1.00 19.64           C
ATOM   3271  NE2 HIS B 194      36.947  34.878  66.622  1.00 18.91           N
ATOM   3272  CD2 HIS B 194      36.416  34.299  65.496  1.00 19.45           C
ATOM   3273  N   ARG B 195      33.937  29.575  63.789  1.00 25.55           N
ATOM   3274  CA  ARG B 195      33.792  28.250  63.171  1.00 26.11           C
ATOM   3275  C   ARG B 195      35.124  27.493  63.036  1.00 25.03           C
ATOM   3276  O   ARG B 195      35.371  26.843  62.024  1.00 25.43           O
ATOM   3277  CB  ARG B 195      33.072  28.342  61.816  1.00 27.35           C
ATOM   3278  CG  ARG B 195      31.648  28.872  61.889  1.00 30.34           C
ATOM   3279  CD  ARG B 195      31.491  30.297  61.356  1.00 35.48           C
ATOM   3280  NE  ARG B 195      30.871  31.192  62.342  1.00 38.85           N
ATOM   3281  CZ  ARG B 195      29.715  31.832  62.163  1.00 40.63           C
ATOM   3282  NH1 ARG B 195      29.239  32.622  63.122  1.00 41.26           N
ATOM   3283  NH2 ARG B 195      29.036  31.693  61.029  1.00 41.16           N
ATOM   3284  N   ILE B 196      35.973  27.586  64.061  1.00 23.94           N
ATOM   3285  CA  ILE B 196      37.173  26.753  64.156  1.00 22.84           C
ATOM   3286  C   ILE B 196      36.864  25.477  64.933  1.00 22.78           C
ATOM   3287  O   ILE B 196      36.369  25.522  66.061  1.00 22.75           O
ATOM   3288  CB  ILE B 196      38.350  27.499  64.835  1.00 22.62           C
ATOM   3289  CG1 ILE B 196      38.796  28.704  64.001  1.00 22.45           C
ATOM   3290  CD1 ILE B 196      39.518  29.751  64.809  1.00 21.32           C
ATOM   3291  CG2 ILE B 196      39.532  26.540  65.094  1.00 21.39           C
ATOM   3292  N   TYR B 197      37.179  24.343  64.321  1.00 21.98           N
ATOM   3293  CA  TYR B 197      36.925  23.056  64.925  1.00 21.05           C
ATOM   3294  C   TYR B 197      38.201  22.241  64.951  1.00 19.95           C
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FIG. 5CCC

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ATOM   3295  O   TYR B 197      38.829  22.027  63.913  1.00 19.38           O
ATOM   3296  CB  TYR B 197      35.844  22.317  64.153  1.00 21.43           C
ATOM   3297  CG  TYR B 197      34.476  22.939  64.268  1.00 23.34           C
ATOM   3298  CD1 TYR B 197      33.623  22.596  65.319  1.00 23.78           C
ATOM   3299  CE1 TYR B 197      32.352  23.160  65.429  1.00 24.21           C
ATOM   3300  CZ  TYR B 197      31.926  24.064  64.476  1.00 25.67           C
ATOM   3301  OH  TYR B 197      30.669  24.607  64.585  1.00 28.55           O
ATOM   3302  CE2 TYR B 197      32.755  24.432  63.418  1.00 24.67           C
ATOM   3303  CD2 TYR B 197      34.023  23.866  63.319  1.00 24.41           C
ATOM   3304  N   THR B 198      38.586  21.816  66.152  1.00 18.61           N
ATOM   3305  CA  THR B 198      39.786  21.022  66.348  1.00 17.89           C
ATOM   3306  C   THR B 198      39.526  19.955  67.400  1.00 17.66           C
ATOM   3307  O   THR B 198      38.458  19.904  68.013  1.00 17.23           O
ATOM   3308  CB  THR B 198      40.964  21.889  66.824  1.00 17.94           C
ATOM   3309  OG1 THR B 198      40.676  22.388  68.138  1.00 17.72           O
ATOM   3310  CG2 THR B 198      41.150  23.156  65.950  1.00 17.22           C
ATOM   3311  N   HIS B 199      40.533  19.121  67.618  1.00 16.63           N
ATOM   3312  CA  HIS B 199      40.508  18.175  68.710  1.00 16.44           C
ATOM   3313  C   HIS B 199      40.353  18.876  70.059  1.00 15.36           C
ATOM   3314  O   HIS B 199      39.738  18.334  70.960  1.00 15.25           O
ATOM   3315  CB  HIS B 199      41.753  17.300  68.653  1.00 16.22           C
ATOM   3316  CG  HIS B 199      42.050  16.792  67.277  1.00 17.04           C
ATOM   3317  ND1 HIS B 199      43.203  17.116  66.593  1.00 16.89           N
ATOM   3318  CE1 HIS B 199      43.187  16.528  65.409  1.00 16.93           C
ATOM   3319  NE2 HIS B 199      42.066  15.837  65.301  1.00 17.10           N
ATOM   3320  CD2 HIS B 199      41.336  15.986  66.454  1.00 16.83           C
ATOM   3321  N   GLN B 200      40.880  20.093  70.175  1.00 14.89           N
ATOM   3322  CA  GLN B 200      40.728  20.887  71.402  1.00 14.19           C
ATOM   3323  C   GLN B 200      39.349  21.529  71.556  1.00 13.87           C
ATOM   3324  O   GLN B 200      38.896  21.756  72.686  1.00 13.67           O
ATOM   3325  CB  GLN B 200      41.842  21.934  71.539  1.00 14.30           C
ATOM   3326  CG  GLN B 200      43.222  21.339  71.765  1.00 13.95           C
ATOM   3327  CD  GLN B 200      43.252  20.383  72.949  1.00 13.26           C
ATOM   3328  OE1 GLN B 200      43.076  19.179  72.787  1.00 15.04           O
ATOM   3329  NE2 GLN B 200      43.459  20.919  74.131  1.00 13.53           N
ATOM   3330  N   SER B 201      38.676  21.812  70.442  1.00 13.58           N
ATOM   3331  CA  SER B 201      37.272  22.233  70.520  1.00 13.82           C
ATOM   3332  C   SER B 201      36.383  21.044  70.905  1.00 14.01           C
ATOM   3333  O   SER B 201      35.402  21.202  71.631  1.00 13.85           O
ATOM   3334  CB  SER B 201      36.794  22.961  69.247  1.00 14.05           C
ATOM   3335  OG  SER B 201      36.793  22.150  68.086  1.00 15.63           O
ATOM   3336  N   ASP B 202      36.757  19.851  70.441  1.00 13.39           N
ATOM   3337  CA  ASP B 202      36.126  18.614  70.878  1.00 12.98           C
ATOM   3338  C   ASP B 202      36.277  18.411  72.392  1.00 12.86           C
ATOM   3339  O   ASP B 202      35.358  17.906  73.047  1.00 12.56           O
ATOM   3340  CB  ASP B 202      36.723  17.416  70.124  1.00 13.56           C
ATOM   3341  CG  ASP B 202      36.026  17.145  68.793  1.00 13.85           C
ATOM   3342  OD1 ASP B 202      36.490  16.243  68.058  1.00 13.90           O
ATOM   3343  OD2 ASP B 202      35.011  17.769  68.403  1.00 13.40           O
ATOM   3344  N   VAL B 203      37.435  18.792  72.941  1.00 12.00           N
ATOM   3345  CA  VAL B 203      37.681  18.658  74.372  1.00 12.04           C
ATOM   3346  C   VAL B 203      36.645  19.473  75.146  1.00 11.95           C
ATOM   3347  O   VAL B 203      36.034  18.975  76.093  1.00 12.60           O
ATOM   3348  CB  VAL B 203      39.140  19.049  74.778  1.00 12.31           C
ATOM   3349  CG1 VAL B 203      39.269  19.222  76.302  1.00 11.33           C
ATOM   3350  CG2 VAL B 203      40.139  17.995  74.288  1.00 11.70           C
ATOM   3351  N   TRP B 204      36.434  20.714  74.722  1.00 12.29           N
ATOM   3352  CA  TRP B 204      35.391  21.553  75.286  1.00 12.63           C
ATOM   3353  C   TRP B 204      34.048  20.807  75.328  1.00 13.17           C
ATOM   3354  O   TRP B 204      33.413  20.732  76.378  1.00 13.58           O
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FIG. 5DDD

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ATOM   3355  CB  TRP B 204      35.268  22.872  74.503  1.00 12.35           C
ATOM   3356  CG  TRP B 204      34.253  23.836  75.100  1.00 11.68           C
ATOM   3357  CD1 TRP B 204      32.909  23.615  75.273  1.00  9.91           C
ATOM   3358  NE1 TRP B 204      32.324  24.711  75.859  1.00 10.34           N
ATOM   3359  CE2 TRP B 204      33.282  25.666  76.086  1.00 10.62           C
ATOM   3360  CD2 TRP B 204      34.510  25.150  75.618  1.00 10.49           C
ATOM   3361  CE3 TRP B 204      35.653  25.948  75.728  1.00 10.89           C
ATOM   3362  CZ3 TRP B 204      35.537  27.219  76.294  1.00 11.73           C
ATOM   3363  CH2 TRP B 204      34.305  27.704  76.752  1.00 10.91           C
ATOM   3364  CZ2 TRP B 204      33.166  26.949  76.657  1.00 11.17           C
ATOM   3365  N   SER B 205      33.635  20.258  74.184  1.00 13.45           N
ATOM   3366  CA  SER B 205      32.371  19.526  74.059  1.00 13.46           C
ATOM   3367  C   SER B 205      32.309  18.335  75.009  1.00 12.99           C
ATOM   3368  O   SER B 205      31.262  18.058  75.594  1.00 12.79           O
ATOM   3369  CB  SER B 205      32.171  19.050  72.621  1.00 13.44           C
ATOM   3370  OG  SER B 205      32.099  20.149  71.740  1.00 14.45           O
ATOM   3371  N   TYR B 206      33.441  17.639  75.142  1.00 13.17           N
ATOM   3372  CA  TYR B 206      33.609  16.547  76.106  1.00 12.53           C
ATOM   3373  C   TYR B 206      33.365  17.014  77.543  1.00 11.99           C
ATOM   3374  O   TYR B 206      32.758  16.305  78.323  1.00 12.39           O
ATOM   3375  CB  TYR B 206      35.008  15.923  75.970  1.00 12.35           C
ATOM   3376  CG  TYR B 206      35.313  14.851  76.994  1.00 12.39           C
ATOM   3377  CD1 TYR B 206      35.838  15.183  78.249  1.00 12.59           C
ATOM   3378  CE1 TYR B 206      36.121  14.190  79.207  1.00 12.82           C
ATOM   3379  CZ  TYR B 206      35.874  12.860  78.907  1.00 12.21           C
ATOM   3380  OH  TYR B 206      36.142  11.892  79.853  1.00 13.41           O
ATOM   3381  CE2 TYR B 206      35.348  12.504  77.670  1.00 11.74           C
ATOM   3382  CD2 TYR B 206      35.064  13.500  76.719  1.00 11.49           C
ATOM   3383  N   GLY B 207      33.834  18.207  77.892  1.00 11.78           N
ATOM   3384  CA  GLY B 207      33.565  18.765  79.206  1.00 11.79           C
ATOM   3385  C   GLY B 207      32.068  18.917  79.493  1.00 12.46           C
ATOM   3386  O   GLY B 207      31.610  18.609  80.605  1.00 11.86           O
ATOM   3387  N   VAL B 208      31.322  19.408  78.495  1.00 11.34           N
ATOM   3388  CA  VAL B 208      29.875  19.594  78.601  1.00 11.23           C
ATOM   3389  C   VAL B 208      29.146  18.242  78.673  1.00 11.48           C
ATOM   3390  O   VAL B 208      28.161  18.093  79.396  1.00 10.39           O
ATOM   3391  CB  VAL B 208      29.298  20.441  77.407  1.00 11.76           C
ATOM   3392  CG1 VAL B 208      27.803  20.687  77.580  1.00 11.13           C
ATOM   3393  CG2 VAL B 208      30.025  21.777  77.258  1.00 10.06           C
ATOM   3394  N   THR B 209      29.656  17.263  77.926  1.00 11.61           N
ATOM   3395  CA  THR B 209      29.079  15.935  77.873  1.00 11.60           C
ATOM   3396  C   THR B 209      29.180  15.226  79.215  1.00 11.88           C
ATOM   3397  O   THR B 209      28.214  14.596  79.657  1.00 11.75           O
ATOM   3398  CB  THR B 209      29.749  15.144  76.743  1.00 12.45           C
ATOM   3399  OG1 THR B 209      29.447  15.790  75.494  1.00 13.45           O
ATOM   3400  CG2 THR B 209      29.150  13.744  76.594  1.00 10.29           C
ATOM   3401  N   VAL B 210      30.339  15.358  79.865  1.00 12.22           N
ATOM   3402  CA  VAL B 210      30.558  14.854  81.226  1.00 11.90           C
ATOM   3403  C   VAL B 210      29.629  15.559  82.227  1.00 11.86           C
ATOM   3404  O   VAL B 210      29.067  14.909  83.128  1.00 12.05           O
ATOM   3405  CB  VAL B 210      32.049  14.982  81.637  1.00 12.02           C
ATOM   3406  CG1 VAL B 210      32.243  14.780  83.138  1.00 12.94           C
ATOM   3407  CG2 VAL B 210      32.886  13.986  80.871  1.00 12.66           C
ATOM   3408  N   TRP B 211      29.449  16.872  82.060  1.00 11.36           N
ATOM   3409  CA  TRP B 211      28.499  17.634  82.886  1.00 11.24           C
ATOM   3410  C   TRP B 211      27.089  17.046  82.762  1.00 11.43           C
ATOM   3411  O   TRP B 211      26.408  16.841  83.760  1.00 11.61           O
ATOM   3412  CB  TRP B 211      28.508  19.119  82.521  1.00 10.51           C
ATOM   3413  CG  TRP B 211      27.663  20.014  83.435  1.00  9.90           C
ATOM   3414  CD1 TRP B 211      28.079  20.670  84.565  1.00 10.06           C
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FIG. 5EEE

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ATOM   3415  NE1 TRP B 211      27.044  21.395  85.108  1.00  8.54           N
ATOM   3416  CE2 TRP B 211      25.927  21.225  84.332  1.00  9.96           C
ATOM   3417  CD2 TRP B 211      26.282  20.362  83.263  1.00  9.15           C
ATOM   3418  CE3 TRP B 211      25.299  20.034  82.309  1.00  9.01           C
ATOM   3419  CZ3 TRP B 211      24.008  20.563  82.457  1.00  8.15           C
ATOM   3420  CH2 TRP B 211      23.690  21.412  83.538  1.00  9.22           C
ATOM   3421  CZ2 TRP B 211      24.629  21.757  84.480  1.00  9.17           C
ATOM   3422  N   GLU B 212      26.673  16.766  81.530  1.00 11.86           N
ATOM   3423  CA  GLU B 212      25.389  16.124  81.249  1.00 12.21           C
ATOM   3424  C   GLU B 212      25.227  14.816  82.015  1.00 12.72           C
ATOM   3425  O   GLU B 212      24.205  14.598  82.666  1.00 13.19           O
ATOM   3426  CB  GLU B 212      25.257  15.836  79.763  1.00 11.92           C
ATOM   3427  CG  GLU B 212      24.918  17.027  78.901  1.00 13.09           C
ATOM   3428  CD  GLU B 212      24.741  16.610  77.460  1.00 15.06           C
ATOM   3429  OE1 GLU B 212      25.757  16.505  76.735  1.00 12.28           O
ATOM   3430  OE2 GLU B 212      23.575  16.358  77.068  1.00 18.01           O
ATOM   3431  N   LEU B 213      26.236  13.947  81.929  1.00 13.18           N
ATOM   3432  CA  LEU B 213      26.201  12.654  82.611  1.00 13.20           C
ATOM   3433  C   LEU B 213      26.074  12.800  84.130  1.00 13.33           C
ATOM   3434  O   LEU B 213      25.288  12.104  84.763  1.00 13.44           O
ATOM   3435  CB  LEU B 213      27.441  11.832  82.252  1.00 12.47           C
ATOM   3436  CG  LEU B 213      27.604  11.439  80.777  1.00 12.45           C
ATOM   3437  CD1 LEU B 213      28.748  10.433  80.612  1.00 10.90           C
ATOM   3438  CD2 LEU B 213      26.289  10.889  80.200  1.00 11.77           C
ATOM   3439  N   MET B 214      26.838  13.730  84.694  1.00 14.15           N
ATOM   3440  CA  MET B 214      26.938  13.906  86.147  1.00 14.30           C
ATOM   3441  C   MET B 214      25.723  14.602  86.754  1.00 13.92           C
ATOM   3442  O   MET B 214      25.510  14.549  87.974  1.00 13.65           O
ATOM   3443  CB  MET B 214      28.215  14.667  86.502  1.00 14.74           C
ATOM   3444  CG  MET B 214      29.498  13.981  86.060  1.00 16.61           C
ATOM   3445  SD  MET B 214      29.819  12.457  86.939  1.00 20.02           S
ATOM   3446  CE  MET B 214      31.210  11.834  86.063  1.00 19.98           C
ATOM   3447  N   THR B 215      24.934  15.256  85.904  1.00 13.54           N
ATOM   3448  CA  THR B 215      23.656  15.826  86.322  1.00 13.05           C
ATOM   3449  C   THR B 215      22.499  14.943  85.863  1.00 13.03           C
ATOM   3450  O   THR B 215      21.344  15.361  85.896  1.00 13.13           O
ATOM   3451  CB  THR B 215      23.486  17.226  85.723  1.00 13.30           C
ATOM   3452  OG1 THR B 215      23.639  17.149  84.297  1.00 13.00           O
ATOM   3453  CG2 THR B 215      24.608  18.166  86.189  1.00 12.58           C
ATOM   3454  N   PHE B 216      22.817  13.743  85.383  1.00 12.98           N
ATOM   3455  CA  PHE B 216      21.812  12.787  84.909  1.00 12.93           C
ATOM   3456  C   PHE B 216      20.943  13.323  83.766  1.00 13.03           C
ATOM   3457  O   PHE B 216      19.750  13.048  83.697  1.00 13.96           O
ATOM   3458  CB  PHE B 216      20.957  12.257  86.080  1.00 12.68           C
ATOM   3459  CG  PHE B 216      21.768  11.566  87.153  1.00 12.58           C
ATOM   3460  CD1 PHE B 216      22.230  10.271  86.960  1.00 11.60           C
ATOM   3461  CE1 PHE B 216      22.987   9.624  87.935  1.00 12.74           C
ATOM   3462  CZ  PHE B 216      23.310  10.284  89.119  1.00 12.78           C
ATOM   3463  CE2 PHE B 216      22.858  11.590  89.323  1.00 13.24           C
ATOM   3464  CD2 PHE B 216      22.088  12.223  88.338  1.00 12.07           C
ATOM   3465  N   GLY B 217      21.562  14.071  82.864  1.00 12.87           N
ATOM   3466  CA  GLY B 217      20.902  14.535  81.660  1.00 13.32           C
ATOM   3467  C   GLY B 217      20.224  15.886  81.780  1.00 13.37           C
ATOM   3468  O   GLY B 217      19.185  16.105  81.163  1.00 12.73           O
ATOM   3469  N   SER B 218      20.813  16.791  82.562  1.00 13.16           N
ATOM   3470  CA  SER B 218      20.261  18.130  82.716  1.00 13.17           C
ATOM   3471  C   SER B 218      20.633  19.024  81.525  1.00 13.52           C
ATOM   3472  O   SER B 218      21.615  18.768  80.813  1.00 12.88           O
ATOM   3473  CB  SER B 218      20.720  18.755  84.034  1.00 13.01           C
ATOM   3474  OG  SER B 218      20.259  17.988  85.139  1.00 14.30           O
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FIG. 5FFF

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ATOM   3475  N   LYS B 219      19.837  20.070  81.315  1.00 13.68           N
ATOM   3476  CA  LYS B 219      20.081  21.018  80.236  1.00 13.58           C
ATOM   3477  C   LYS B 219      21.188  22.008  80.619  1.00 13.36           C
ATOM   3478  O   LYS B 219      21.112  22.664  81.673  1.00 13.45           O
ATOM   3479  CB  LYS B 219      18.787  21.746  79.870  1.00 13.66           C
ATOM   3480  CG  LYS B 219      17.761  20.866  79.175  1.00 15.43           C
ATOM   3481  CD  LYS B 219      16.324  21.244  79.537  1.00 16.23           C
ATOM   3482  N   PRO B 220      22.228  22.097  79.785  1.00 13.07           N
ATOM   3483  CA  PRO B 220      23.303  23.075  79.997  1.00 12.97           C
ATOM   3484  C   PRO B 220      22.840  24.495  79.709  1.00 13.50           C
ATOM   3485  O   PRO B 220      22.134  24.725  78.723  1.00 13.45           O
ATOM   3486  CB  PRO B 220      24.390  22.648  78.999  1.00 12.67           C
ATOM   3487  CG  PRO B 220      23.711  21.814  77.992  1.00 12.80           C
ATOM   3488  CD  PRO B 220      22.465  21.256  78.599  1.00 12.47           C
ATOM   3489  N   TYR B 221      23.237  25.434  80.571  1.00 13.83           N
ATOM   3490  CA  TYR B 221      22.876  26.838  80.422  1.00 14.51           C
ATOM   3491  C   TYR B 221      21.378  26.971  80.303  1.00 14.56           C
ATOM   3492  O   TYR B 221      20.872  27.621  79.405  1.00 15.20           O
ATOM   3493  CB  TYR B 221      23.562  27.469  79.202  1.00 14.32           C
ATOM   3494  CG  TYR B 221      25.038  27.200  79.119  1.00 13.60           C
ATOM   3495  CD1 TYR B 221      25.927  27.812  79.997  1.00 13.71           C
ATOM   3496  CE1 TYR B 221      27.279  27.568  79.923  1.00 14.78           C
ATOM   3497  CZ  TYR B 221      27.759  26.703  78.956  1.00 15.26           C
ATOM   3498  OH  TYR B 221      29.106  26.462  78.868  1.00 17.47           O
ATOM   3499  CE2 TYR B 221      26.897  26.086  78.072  1.00 14.24           C
ATOM   3500  CD2 TYR B 221      25.547  26.339  78.158  1.00 14.07           C
ATOM   3501  N   ASP B 222      20.681  26.315  81.216  1.00 16.09           N
ATOM   3502  CA  ASP B 222      19.235  26.351  81.292  1.00 16.84           C
ATOM   3503  C   ASP B 222      18.831  27.783  81.600  1.00 17.60           C
ATOM   3504  O   ASP B 222      19.357  28.395  82.536  1.00 18.21           O
ATOM   3505  CB  ASP B 222      18.780  25.401  82.403  1.00 16.45           C
ATOM   3506  CG  ASP B 222      17.320  25.049  82.322  1.00 15.83           C
ATOM   3507  OD1 ASP B 222      16.699  25.175  81.231  1.00 15.41           O
ATOM   3508  OD2 ASP B 222      16.712  24.611  83.320  1.00 15.50           O
ATOM   3509  N   GLY B 223      17.937  28.332  80.789  1.00 18.15           N
ATOM   3510  CA  GLY B 223      17.547  29.728  80.934  1.00 19.05           C
ATOM   3511  C   GLY B 223      18.352  30.732  80.124  1.00 19.50           C
ATOM   3512  O   GLY B 223      18.049  31.919  80.176  1.00 20.10           O
ATOM   3513  N   ILE B 224      19.382  30.282  79.396  1.00 20.10           N
ATOM   3514  CA  ILE B 224      20.124  31.173  78.485  1.00 20.19           C
ATOM   3515  C   ILE B 224      19.838  30.781  77.039  1.00 20.41           C
ATOM   3516  O   ILE B 224      20.013  29.620  76.674  1.00 20.75           O
ATOM   3517  CB  ILE B 224      21.664  31.168  78.759  1.00 20.38           C
ATOM   3518  CG1 ILE B 224      21.973  31.455  80.235  1.00 19.85           C
ATOM   3519  CD1 ILE B 224      23.430  31.233  80.599  1.00 18.90           C
ATOM   3520  CG2 ILE B 224      22.400  32.192  77.864  1.00 19.94           C
ATOM   3521  N   PRO B 225      19.385  31.735  76.224  1.00 20.41           N
ATOM   3522  CA  PRO B 225      19.148  31.475  74.796  1.00 20.58           C
ATOM   3523  C   PRO B 225      20.475  31.278  74.060  1.00 20.74           C
ATOM   3524  O   PRO B 225      21.480  31.906  74.416  1.00 20.85           O
ATOM   3525  CB  PRO B 225      18.438  32.745  74.307  1.00 20.68           C
ATOM   3526  CG  PRO B 225      18.062  33.522  75.562  1.00 20.97           C
ATOM   3527  CD  PRO B 225      19.078  33.129  76.596  1.00 20.54           C
ATOM   3528  N   ALA B 226      20.471  30.406  73.057  1.00 21.00           N
ATOM   3529  CA  ALA B 226      21.679  30.026  72.319  1.00 22.30           C
ATOM   3530  C   ALA B 226      22.485  31.217  71.793  1.00 23.01           C
ATOM   3531  O   ALA B 226      23.716  31.171  71.771  1.00 23.39           O
ATOM   3532  CB  ALA B 226      21.330  29.048  71.169  1.00 21.73           C
ATOM   3533  N   SER B 227      21.787  32.279  71.382  1.00 23.77           N
ATOM   3534  CA  SER B 227      22.430  33.487  70.848  1.00 23.79           C
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FIG. 5GGG

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ATOM   3535  C   SER B 227      23.269  34.259  71.863  1.00 23.26           C
ATOM   3536  O   SER B 227      24.071  35.103  71.478  1.00 23.63           O
ATOM   3537  CB  SER B 227      21.386  34.430  70.242  1.00 24.24           C
ATOM   3538  OG  SER B 227      20.457  34.855  71.232  1.00 25.39           O
ATOM   3539  N   GLU B 228      23.093  33.968  73.148  1.00 22.99           N
ATOM   3540  CA  GLU B 228      23.759  34.725  74.210  1.00 22.66           C
ATOM   3541  C   GLU B 228      24.938  33.978  74.820  1.00 22.10           C
ATOM   3542  O   GLU B 228      25.642  34.508  75.683  1.00 22.07           O
ATOM   3543  CB  GLU B 228      22.762  35.078  75.311  1.00 23.05           C
ATOM   3544  CG  GLU B 228      21.780  36.167  74.920  1.00 25.79           C
ATOM   3545  CD  GLU B 228      22.327  37.559  75.178  1.00 27.85           C
ATOM   3546  OE1 GLU B 228      22.176  38.061  76.317  1.00 30.54           O
ATOM   3547  OE2 GLU B 228      22.910  38.143  74.248  1.00 26.71           O
ATOM   3548  N   ILE B 229      25.151  32.750  74.364  1.00 21.35           N
ATOM   3549  CA  ILE B 229      26.117  31.865  74.987  1.00 21.14           C
ATOM   3550  C   ILE B 229      27.549  32.387  74.877  1.00 21.31           C
ATOM   3551  O   ILE B 229      28.254  32.449  75.884  1.00 21.30           O
ATOM   3552  CB  ILE B 229      25.972  30.415  74.452  1.00 20.56           C
ATOM   3553  CG1 ILE B 229      24.714  29.751  75.034  1.00 20.34           C
ATOM   3554  CD1 ILE B 229      24.642  29.724  76.558  1.00 19.28           C
ATOM   3555  CG2 ILE B 229      27.214  29.583  74.767  1.00 20.51           C
ATOM   3556  N   SER B 230      27.968  32.774  73.672  1.00 21.47           N
ATOM   3557  CA  SER B 230      29.325  33.285  73.469  1.00 22.24           C
ATOM   3558  C   SER B 230      29.593  34.505  74.357  1.00 22.55           C
ATOM   3559  O   SER B 230      30.708  34.698  74.849  1.00 23.52           O
ATOM   3560  CB  SER B 230      29.608  33.565  71.982  1.00 22.20           C
ATOM   3561  OG  SER B 230      28.830  34.633  71.465  1.00 24.03           O
ATOM   3562  N   SER B 231      28.547  35.291  74.596  1.00 22.59           N
ATOM   3563  CA  SER B 231      28.614  36.461  75.466  1.00 23.00           C
ATOM   3564  C   SER B 231      28.862  36.106  76.938  1.00 22.72           C
ATOM   3565  O   SER B 231      29.770  36.665  77.573  1.00 23.09           O
ATOM   3566  CB  SER B 231      27.333  37.281  75.326  1.00 23.12           C
ATOM   3567  OG  SER B 231      27.439  38.487  76.043  1.00 25.45           O
ATOM   3568  N   ILE B 232      28.067  35.176  77.477  1.00 22.05           N
ATOM   3569  CA  ILE B 232      28.240  34.741  78.866  1.00 21.30           C
ATOM   3570  C   ILE B 232      29.578  34.012  79.079  1.00 21.03           C
ATOM   3571  O   ILE B 232      30.209  34.166  80.118  1.00 20.96           O
ATOM   3572  CB  ILE B 232      27.008  33.920  79.391  1.00 21.78           C
ATOM   3573  CG1 ILE B 232      26.869  32.554  78.697  1.00 21.34           C
ATOM   3574  CD1 ILE B 232      27.378  31.395  79.518  1.00 20.20           C
ATOM   3575  CG2 ILE B 232      25.705  34.724  79.235  1.00 21.34           C
ATOM   3576  N   LEU B 233      30.025  33.255  78.081  1.00 20.86           N
ATOM   3577  CA  LEU B 233      31.322  32.575  78.164  1.00 21.43           C
ATOM   3578  C   LEU B 233      32.481  33.562  78.256  1.00 21.77           C
ATOM   3579  O   LEU B 233      33.367  33.414  79.105  1.00 21.48           O
ATOM   3580  CB  LEU B 233      31.529  31.620  76.987  1.00 20.79           C
ATOM   3581  CG  LEU B 233      30.607  30.402  76.908  1.00 20.04           C
ATOM   3582  CD1 LEU B 233      30.807  29.705  75.583  1.00 19.71           C
ATOM   3583  CD2 LEU B 233      30.821  29.433  78.089  1.00 19.12           C
ATOM   3584  N   GLU B 234      32.453  34.576  77.392  1.00 23.05           N
ATOM   3585  CA  GLU B 234      33.456  35.648  77.400  1.00 24.05           C
ATOM   3586  C   GLU B 234      33.537  36.370  78.741  1.00 23.77           C
ATOM   3587  O   GLU B 234      34.603  36.845  79.118  1.00 23.80           O
ATOM   3588  CB  GLU B 234      33.202  36.646  76.263  1.00 24.51           C
ATOM   3589  CG  GLU B 234      33.719  36.154  74.922  1.00 26.00           C
ATOM   3590  CD  GLU B 234      33.368  37.074  73.762  1.00 28.75           C
ATOM   3591  OE1 GLU B 234      34.277  37.397  72.973  1.00 30.25           O
ATOM   3592  OE2 GLU B 234      32.191  37.476  73.627  1.00 30.99           O
ATOM   3593  N   LYS B 235      32.413  36.424  79.457  1.00 24.49           N
ATOM   3594  CA  LYS B 235      32.340  37.005  80.797  1.00 24.93           C
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FIG. 5HHH

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ATOM   3595  C   LYS B 235      32.902  36.086  81.877  1.00 24.45           C
ATOM   3596  O   LYS B 235      33.078  36.505  83.024  1.00 24.35           O
ATOM   3597  CB  LYS B 235      30.893  37.355  81.150  1.00 25.98           C
ATOM   3598  CG  LYS B 235      30.368  38.618  80.492  1.00 28.19           C
ATOM   3599  CD  LYS B 235      28.862  38.763  80.711  1.00 31.13           C
ATOM   3600  CE  LYS B 235      28.557  39.471  82.032  1.00 33.15           C
ATOM   3601  NZ  LYS B 235      27.086  39.595  82.276  1.00 35.13           N
ATOM   3602  N   GLY B 236      33.174  34.836  81.512  1.00 24.09           N
ATOM   3603  CA  GLY B 236      33.720  33.854  82.438  1.00 23.13           C
ATOM   3604  C   GLY B 236      32.683  32.941  83.070  1.00 22.39           C
ATOM   3605  O   GLY B 236      32.984  32.221  84.017  1.00 22.47           O
ATOM   3606  N   GLU B 237      31.458  32.969  82.555  1.00 21.87           N
ATOM   3607  CA  GLU B 237      30.410  32.082  83.055  1.00 21.59           C
ATOM   3608  C   GLU B 237      30.594  30.660  82.537  1.00 20.08           C
ATOM   3609  O   GLU B 237      30.942  30.449  81.372  1.00 19.72           O
ATOM   3610  CB  GLU B 237      29.026  32.599  82.682  1.00 22.13           C
ATOM   3611  CG  GLU B 237      28.732  33.985  83.229  1.00 26.28           C
ATOM   3612  CD  GLU B 237      28.064  33.947  84.590  1.00 29.38           C
ATOM   3613  OE1 GLU B 237      28.199  32.928  85.306  1.00 31.52           O
ATOM   3614  OE2 GLU B 237      27.396  34.941  84.942  1.00 31.26           O
ATOM   3615  N   ARG B 238      30.339  29.705  83.425  1.00 18.37           N
ATOM   3616  CA  ARG B 238      30.519  28.289  83.166  1.00 17.29           C
ATOM   3617  C   ARG B 238      29.401  27.486  83.817  1.00 16.49           C
ATOM   3618  O   ARG B 238      28.752  27.943  84.761  1.00 17.26           O
ATOM   3619  CB  ARG B 238      31.879  27.807  83.700  1.00 17.10           C
ATOM   3620  CG  ARG B 238      33.110  28.341  82.955  1.00 16.95           C
ATOM   3621  CD  ARG B 238      33.069  28.139  81.423  1.00 17.64           C
ATOM   3622  NE  ARG B 238      34.316  28.581  80.801  1.00 17.77           N
ATOM   3623  CZ  ARG B 238      34.563  29.812  80.386  1.00 16.60           C
ATOM   3624  NH1 ARG B 238      33.649  30.770  80.503  1.00 16.67           N
ATOM   3625  NH2 ARG B 238      35.738  30.085  79.847  1.00 17.35           N
ATOM   3626  N   LEU B 239      29.186  26.283  83.303  1.00 15.01           N
ATOM   3627  CA  LEU B 239      28.277  25.312  83.902  1.00 13.63           C
ATOM   3628  C   LEU B 239      28.645  25.037  85.362  1.00 12.77           C
ATOM   3629  O   LEU B 239      29.823  24.919  85.687  1.00 12.82           O
ATOM   3630  CB  LEU B 239      28.325  24.020  83.092  1.00 12.97           C
ATOM   3631  CG  LEU B 239      27.874  24.124  81.641  1.00 12.81           C
ATOM   3632  CD1 LEU B 239      28.202  22.836  80.913  1.00 10.97           C
ATOM   3633  CD2 LEU B 239      26.365  24.432  81.584  1.00 12.44           C
ATOM   3634  N   PRO B 240      27.642  24.952  86.236  1.00 12.88           N
ATOM   3635  CA  PRO B 240      27.869  24.819  87.688  1.00 12.68           C
ATOM   3636  C   PRO B 240      28.288  23.416  88.106  1.00 13.42           C
ATOM   3637  O   PRO B 240      28.120  22.485  87.319  1.00 14.52           O
ATOM   3638  CB  PRO B 240      26.491  25.136  88.276  1.00 12.16           C
ATOM   3639  CG  PRO B 240      25.533  24.665  87.217  1.00 11.29           C
ATOM   3640  CD  PRO B 240      26.197  25.004  85.910  1.00 12.22           C
ATOM   3641  N   GLN B 241      28.808  23.279  89.326  1.00 13.71           N
ATOM   3642  CA  GLN B 241      29.254  22.000  89.879  1.00 14.12           C
ATOM   3643  C   GLN B 241      28.063  21.103  90.199  1.00 14.23           C
ATOM   3644  O   GLN B 241      27.214  21.480  91.005  1.00 15.16           O
ATOM   3645  CB  GLN B 241      30.061  22.253  91.152  1.00 14.67           C
ATOM   3646  CG  GLN B 241      30.628  21.019  91.861  1.00 14.50           C
ATOM   3647  CD  GLN B 241      31.366  21.380  93.141  1.00 15.22           C
ATOM   3648  OE1 GLN B 241      31.656  22.551  93.390  1.00 17.17           O
ATOM   3649  NE2 GLN B 241      31.679  20.379  93.949  1.00 15.41           N
ATOM   3650  N   PRO B 242      27.994  19.927  89.577  1.00 14.19           N
ATOM   3651  CA  PRO B 242      26.899  18.985  89.845  1.00 14.08           C
ATOM   3652  C   PRO B 242      26.889  18.561  91.310  1.00 13.95           C
ATOM   3653  O   PRO B 242      27.968  18.432  91.894  1.00 15.61           O
ATOM   3654  CB  PRO B 242      27.220  17.799  88.925  1.00 13.09           C
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FIG. 5III

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ATOM   3655  CG  PRO B 242      28.074  18.402  87.846  1.00 13.75           C
ATOM   3656  CD  PRO B 242      28.940  19.398  88.571  1.00 13.98           C
ATOM   3657  N   PRO B 243      25.711  18.386  91.904  1.00 13.79           N
ATOM   3658  CA  PRO B 243      25.603  17.963  93.308  1.00 13.77           C
ATOM   3659  C   PRO B 243      26.433  16.721  93.663  1.00 14.39           C
ATOM   3660  O   PRO B 243      26.956  16.657  94.786  1.00 14.49           O
ATOM   3661  CB  PRO B 243      24.110  17.674  93.468  1.00 13.38           C
ATOM   3662  CG  PRO B 243      23.452  18.564  92.473  1.00 13.06           C
ATOM   3663  CD  PRO B 243      24.383  18.610  91.296  1.00 13.60           C
ATOM   3664  N   ILE B 244      26.574  15.776  92.732  1.00 14.56           N
ATOM   3665  CA  ILE B 244      27.276  14.513  93.021  1.00 15.32           C
ATOM   3666  C   ILE B 244      28.793  14.614  92.881  1.00 15.58           C
ATOM   3667  O   ILE B 244      29.523  13.705  93.302  1.00 16.52           O
ATOM   3668  CB  ILE B 244      26.747  13.341  92.142  1.00 14.86           C
ATOM   3669  CG1 ILE B 244      27.265  13.462  90.694  1.00 15.57           C
ATOM   3670  CD1 ILE B 244      27.091  12.206  89.848  1.00 14.23           C
ATOM   3671  CG2 ILE B 244      25.217  13.248  92.220  1.00 14.47           C
ATOM   3672  N   CYS B 245      29.267  15.706  92.289  1.00 15.23           N
ATOM   3673  CA  CYS B 245      30.682  15.833  91.995  1.00 15.43           C
ATOM   3674  C   CYS B 245      31.470  16.391  93.160  1.00 15.26           C
ATOM   3675  O   CYS B 245      31.106  17.410  93.745  1.00 15.44           O
ATOM   3676  CB  CYS B 245      30.911  16.717  90.770  1.00 15.92           C
ATOM   3677  SG  CYS B 245      30.389  15.976  89.221  1.00 18.07           S
ATOM   3678  N   THR B 246      32.565  15.720  93.492  1.00 14.87           N
ATOM   3679  CA  THR B 246      33.587  16.353  94.306  1.00 14.14           C
ATOM   3680  C   THR B 246      34.242  17.406  93.419  1.00 14.34           C
ATOM   3681  O   THR B 246      34.088  17.379  92.179  1.00 14.25           O
ATOM   3682  CB  THR B 246      34.629  15.335  94.806  1.00 14.14           C
ATOM   3683  OG1 THR B 246      35.186  14.629  93.691  1.00 13.28           O
ATOM   3684  CG2 THR B 246      33.958  14.251  95.643  1.00 12.79           C
ATOM   3685  N   ILE B 247      34.954  18.335  94.045  1.00 13.78           N
ATOM   3686  CA  ILE B 247      35.588  19.422  93.316  1.00 14.18           C
ATOM   3687  C   ILE B 247      36.708  18.926  92.404  1.00 14.74           C
ATOM   3688  O   ILE B 247      37.034  19.581  91.417  1.00 15.64           O
ATOM   3689  CB  ILE B 247      36.086  20.542  94.300  1.00 14.39           C
ATOM   3690  CG1 ILE B 247      36.346  21.862  93.542  1.00 14.02           C
ATOM   3691  CG2 ILE B 247      37.291  20.069  95.113  1.00 12.39           C
ATOM   3692  N   ASP B 248      37.287  17.771  92.727  1.00 15.22           N
ATOM   3693  CA  ASP B 248      38.311  17.166  91.881  1.00 15.68           C
ATOM   3694  C   ASP B 248      37.786  16.862  90.473  1.00 15.45           C
ATOM   3695  O   ASP B 248      38.500  17.087  89.484  1.00 15.83           O
ATOM   3696  CB  ASP B 248      38.871  15.905  92.530  1.00 16.79           C
ATOM   3697  CG  ASP B 248      39.500  16.174  93.897  1.00 18.94           C
ATOM   3698  OD1 ASP B 248      38.815  16.723  94.791  1.00 21.19           O
ATOM   3699  OD2 ASP B 248      40.674  15.860  94.166  1.00 19.48           O
ATOM   3700  N   VAL B 249      36.545  16.371  90.388  1.00 14.24           N
ATOM   3701  CA  VAL B 249      35.926  16.013  89.106  1.00 13.40           C
ATOM   3702  C   VAL B 249      35.535  17.266  88.329  1.00 13.20           C
ATOM   3703  O   VAL B 249      35.783  17.369  87.126  1.00 12.26           O
ATOM   3704  CB  VAL B 249      34.668  15.099  89.280  1.00 13.81           C
ATOM   3705  CG1 VAL B 249      34.045  14.760  87.915  1.00 13.08           C
ATOM   3706  CG2 VAL B 249      35.011  13.819  90.054  1.00 12.57           C
ATOM   3707  N   TYR B 250      34.913  18.207  89.034  1.00 13.48           N
ATOM   3708  CA  TYR B 250      34.542  19.506  88.479  1.00 13.90           C
ATOM   3709  C   TYR B 250      35.733  20.286  87.906  1.00 14.58           C
ATOM   3710  O   TYR B 250      35.614  20.900  86.850  1.00 14.68           O
ATOM   3711  CB  TYR B 250      33.815  20.344  89.533  1.00 12.92           C
ATOM   3712  CG  TYR B 250      33.230  21.645  89.005  1.00 11.54           C
ATOM   3713  CD1 TYR B 250      33.515  22.867  89.625  1.00 11.65           C
ATOM   3714  CE1 TYR B 250      32.974  24.055  89.154  1.00 11.22           C
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FIG. 5JJJ

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ATOM   3715  CZ  TYR B 250      32.142  24.023  88.047  1.00 12.29           C
ATOM   3716  OH  TYR B 250      31.582  25.189  87.558  1.00 12.34           O
ATOM   3717  CE2 TYR B 250      31.855  22.821  87.419  1.00 10.40           C
ATOM   3718  CD2 TYR B 250      32.396  21.650  87.903  1.00 10.00           C
ATOM   3719  N   MET B 251      36.858  20.264  88.618  1.00 16.21           N
ATOM   3720  CA  MET B 251      38.120  20.880  88.171  1.00 17.64           C
ATOM   3721  C   MET B 251      38.581  20.391  86.785  1.00 17.75           C
ATOM   3722  O   MET B 251      39.111  21.178  85.996  1.00 17.79           O
ATOM   3723  CB  MET B 251      39.229  20.647  89.203  1.00 17.74           C
ATOM   3724  CG  MET B 251      39.233  21.629  90.365  1.00 21.44           C
ATOM   3725  SD  MET B 251      40.267  21.062  91.762  1.00 27.32           S
ATOM   3726  CE  MET B 251      41.721  21.960  91.509  1.00 27.87           C
ATOM   3727  N   ILE B 252      38.388  19.102  86.495  1.00 17.87           N
ATOM   3728  CA  ILE B 252      38.654  18.574  85.152  1.00 18.51           C
ATOM   3729  C   ILE B 252      37.730  19.186  84.108  1.00 18.27           C
ATOM   3730  O   ILE B 252      38.181  19.544  83.013  1.00 18.74           O
ATOM   3731  CB  ILE B 252      38.526  17.042  85.084  1.00 19.20           C
ATOM   3732  CG1 ILE B 252      39.443  16.370  86.093  1.00 20.17           C
ATOM   3733  CD1 ILE B 252      39.032  14.961  86.378  1.00 23.78           C
ATOM   3734  CG2 ILE B 252      38.873  16.549  83.682  1.00 19.28           C
ATOM   3735  N   MET B 253      36.445  19.291  84.444  1.00 17.73           N
ATOM   3736  CA  MET B 253      35.456  19.906  83.560  1.00 17.78           C
ATOM   3737  C   MET B 253      35.860  21.346  83.224  1.00 17.74           C
ATOM   3738  O   MET B 253      35.894  21.732  82.060  1.00 17.41           O
ATOM   3739  CB  MET B 253      34.054  19.877  84.189  1.00 17.77           C
ATOM   3740  CG  MET B 253      33.508  18.478  84.505  1.00 18.61           C
ATOM   3741  SD  MET B 253      31.797  18.471  85.149  1.00 19.86           S
ATOM   3742  CE  MET B 253      31.836  17.018  86.082  1.00 19.64           C
ATOM   3743  N   VAL B 254      36.180  22.121  84.254  1.00 17.59           N
ATOM   3744  CA  VAL B 254      36.503  23.544  84.112  1.00 17.73           C
ATOM   3745  C   VAL B 254      37.706  23.743  83.194  1.00 17.23           C
ATOM   3746  O   VAL B 254      37.731  24.657  82.364  1.00 17.29           O
ATOM   3747  CB  VAL B 254      36.748  24.199  85.506  1.00 17.93           C
ATOM   3748  CG1 VAL B 254      37.495  25.528  85.380  1.00 18.54           C
ATOM   3749  CG2 VAL B 254      35.419  24.376  86.260  1.00 17.08           C
ATOM   3750  N   LYS B 255      38.687  22.859  83.343  1.00 17.16           N
ATOM   3751  CA  LYS B 255      39.880  22.836  82.506  1.00 16.61           C
ATOM   3752  C   LYS B 255      39.512  22.684  81.032  1.00 15.72           C
ATOM   3753  O   LYS B 255      40.207  23.208  80.166  1.00 16.37           O
ATOM   3754  CB  LYS B 255      40.802  21.691  82.947  1.00 17.11           C
ATOM   3755  CG  LYS B 255      41.818  22.054  84.028  1.00 18.64           C
ATOM   3756  CD  LYS B 255      42.103  20.882  84.970  1.00 19.39           C
ATOM   3757  CE  LYS B 255      43.506  20.349  84.788  1.00 21.72           C
ATOM   3758  NZ  LYS B 255      44.190  20.115  86.100  1.00 22.15           N
ATOM   3759  N   CYS B 256      38.423  21.969  80.752  1.00 14.38           N
ATOM   3760  CA  CYS B 256      37.957  21.761  79.381  1.00 14.28           C
ATOM   3761  C   CYS B 256      37.374  23.023  78.742  1.00 14.34           C
ATOM   3762  O   CYS B 256      37.261  23.102  77.518  1.00 14.06           O
ATOM   3763  CB  CYS B 256      36.911  20.647  79.317  1.00 13.80           C
ATOM   3764  SG  CYS B 256      37.547  18.985  79.618  1.00 14.32           S
ATOM   3765  N   TRP B 257      37.004  23.988  79.580  1.00 13.91           N
ATOM   3766  CA  TRP B 257      36.295  25.194  79.157  1.00 13.77           C
ATOM   3767  C   TRP B 257      37.165  26.465  79.220  1.00 15.02           C
ATOM   3768  O   TRP B 257      36.648  27.584  79.167  1.00 14.41           O
ATOM   3769  CB  TRP B 257      35.042  25.383  80.023  1.00 12.55           C
ATOM   3770  CG  TRP B 257      34.140  24.193  80.049  1.00  9.07           C
ATOM   3771  CD1 TRP B 257      33.892  23.342  79.019  1.00  5.44           C
ATOM   3772  NE1 TRP B 257      32.998  22.380  79.409  1.00  6.93           N
ATOM   3773  CE2 TRP B 257      32.643  22.594  80.715  1.00  7.17           C
ATOM   3774  CD2 TRP B 257      33.338  23.739  81.151  1.00  7.71           C
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FIG. 5KKK

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ATOM   3775  CE3 TRP B 257      33.136  24.186  82.473  1.00  8.05           C
ATOM   3776  CZ3 TRP B 257      32.261  23.477  83.304  1.00  6.27           C
ATOM   3777  CH2 TRP B 257      31.588  22.337  82.834  1.00  6.51           C
ATOM   3778  CZ2 TRP B 257      31.766  21.882  81.544  1.00  7.14           C
ATOM   3779  N   MET B 258      38.478  26.292  79.334  1.00 16.06           N
ATOM   3780  CA  MET B 258      39.384  27.428  79.285  1.00 18.60           C
ATOM   3781  C   MET B 258      39.374  28.045  77.888  1.00 19.06           C
ATOM   3782  O   MET B 258      39.352  27.323  76.892  1.00 20.11           O
ATOM   3783  CB  MET B 258      40.794  27.020  79.714  1.00 18.90           C
ATOM   3784  CG  MET B 258      40.945  26.949  81.224  1.00 21.95           C
ATOM   3785  SD  MET B 258      42.402  26.035  81.734  1.00 30.27           S
ATOM   3786  CE  MET B 258      42.043  25.815  83.408  1.00 27.94           C
ATOM   3787  N   ILE B 259      39.367  29.376  77.817  1.00 19.93           N
ATOM   3788  CA  ILE B 259      39.271  30.074  76.531  1.00 20.24           C
ATOM   3789  C   ILE B 259      40.439  29.714  75.623  1.00 20.46           C
ATOM   3790  O   ILE B 259      40.249  29.553  74.423  1.00 20.89           O
ATOM   3791  CB  ILE B 259      39.151  31.609  76.719  1.00 20.93           C
ATOM   3792  CG1 ILE B 259      37.884  31.970  77.493  1.00 21.43           C
ATOM   3793  CD1 ILE B 259      36.577  31.480  76.863  1.00 23.32           C
ATOM   3794  CG2 ILE B 259      39.156  32.355  75.359  1.00 21.81           C
ATOM   3795  N   ASP B 260      41.636  29.573  76.194  1.00 20.65           N
ATOM   3796  CA  ASP B 260      42.797  29.173  75.414  1.00 20.93           C
ATOM   3797  C   ASP B 260      42.796  27.662  75.198  1.00 21.14           C
ATOM   3798  O   ASP B 260      43.024  26.889  76.126  1.00 20.65           O
ATOM   3799  CB  ASP B 260      44.106  29.630  76.071  1.00 21.15           C
ATOM   3800  CG  ASP B 260      45.321  29.442  75.160  1.00 22.12           C
ATOM   3801  OD1 ASP B 260      46.226  30.305  75.178  1.00 23.82           O
ATOM   3802  OD2 ASP B 260      45.460  28.470  74.386  1.00 22.28           O
ATOM   3803  N   ALA B 261      42.556  27.269  73.951  1.00 21.77           N
ATOM   3804  CA  ALA B 261      42.445  25.875  73.539  1.00 22.35           C
ATOM   3805  C   ALA B 261      43.666  25.045  73.940  1.00 23.20           C
ATOM   3806  O   ALA B 261      43.546  23.850  74.242  1.00 22.79           O
ATOM   3807  CB  ALA B 261      42.217  25.802  72.036  1.00 21.66           C
ATOM   3808  N   ASP B 262      44.829  25.694  73.958  1.00 24.00           N
ATOM   3809  CA  ASP B 262      46.083  25.043  74.329  1.00 24.82           C
ATOM   3810  C   ASP B 262      46.217  24.807  75.831  1.00 24.77           C
ATOM   3811  O   ASP B 262      47.012  23.971  76.255  1.00 25.09           O
ATOM   3812  CB  ASP B 262      47.278  25.833  73.784  1.00 25.21           C
ATOM   3813  CG  ASP B 262      47.359  25.783  72.270  1.00 26.70           C
ATOM   3814  OD1 ASP B 262      47.079  24.712  71.693  1.00 28.08           O
ATOM   3815  OD2 ASP B 262      47.688  26.758  71.564  1.00 29.43           O
ATOM   3816  N   SER B 263      45.447  25.553  76.623  1.00 24.81           N
ATOM   3817  CA  SER B 263      45.372  25.362  78.071  1.00 24.47           C
ATOM   3818  C   SER B 263      44.509  24.149  78.456  1.00 23.99           C
ATOM   3819  O   SER B 263      44.596  23.661  79.580  1.00 24.56           O
ATOM   3820  CB  SER B 263      44.796  26.612  78.744  1.00 24.66           C
ATOM   3821  OG  SER B 263      45.670  27.720  78.626  1.00 26.51           O
ATOM   3822  N   ARG B 264      43.658  23.696  77.537  1.00 22.96           N
ATOM   3823  CA  ARG B 264      42.748  22.582  77.792  1.00 22.04           C
ATOM   3824  C   ARG B 264      43.495  21.255  77.820  1.00 21.62           C
ATOM   3825  O   ARG B 264      44.472  21.074  77.083  1.00 21.63           O
ATOM   3826  CB  ARG B 264      41.669  22.512  76.708  1.00 22.15           C
ATOM   3827  CG  ARG B 264      40.656  23.648  76.734  1.00 21.27           C
ATOM   3828  CD  ARG B 264      39.725  23.679  75.532  1.00 18.87           C
ATOM   3829  NE  ARG B 264      39.303  25.041  75.234  1.00 18.42           N
ATOM   3830  CZ  ARG B 264      38.856  25.459  74.057  1.00 19.86           C
ATOM   3831  NH1 ARG B 264      38.512  26.730  73.909  1.00 19.76           N
ATOM   3832  NH2 ARG B 264      38.740  24.618  73.027  1.00 20.18           N
ATOM   3833  N   PRO B 265      43.035  20.324  78.658  1.00 20.99           N
ATOM   3834  CA  PRO B 265      43.554  18.952  78.640  1.00 20.37           C
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FIG. 5LLL

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ATOM   3835  C   PRO B 265      43.422  18.352  77.248  1.00 20.21           C
ATOM   3836  O   PRO B 265      42.597  18.807  76.451  1.00 20.47           O
ATOM   3837  CB  PRO B 265      42.624  18.195  79.599  1.00 20.50           C
ATOM   3838  CG  PRO B 265      41.892  19.223  80.399  1.00 20.26           C
ATOM   3839  CD  PRO B 265      41.985  20.518  79.675  1.00 20.58           C
ATOM   3840  N   LYS B 266      44.243  17.348  76.959  1.00 19.85           N
ATOM   3841  CA  LYS B 266      44.143  16.588  75.724  1.00 18.81           C
ATOM   3842  C   LYS B 266      43.412  15.300  76.067  1.00 18.67           C
ATOM   3843  O   LYS B 266      43.386  14.908  77.236  1.00 18.91           O
ATOM   3844  CB  LYS B 266      45.542  16.290  75.181  1.00 19.50           C
ATOM   3845  CG  LYS B 266      46.300  17.529  74.654  1.00 18.95           C
ATOM   3846  N   PHE B 267      42.821  14.634  75.075  1.00 17.83           N
ATOM   3847  CA  PHE B 267      42.064  13.410  75.358  1.00 17.53           C
ATOM   3848  C   PHE B 267      42.879  12.317  76.080  1.00 17.68           C
ATOM   3849  O   PHE B 267      42.378  11.690  77.008  1.00 18.05           O
ATOM   3850  CB  PHE B 267      41.351  12.877  74.103  1.00 16.96           C
ATOM   3851  CG  PHE B 267      40.111  13.665  73.724  1.00 14.86           C
ATOM   3852  CD1 PHE B 267      39.015  13.725  74.581  1.00 11.46           C
ATOM   3853  CE1 PHE B 267      37.884  14.437  74.241  1.00 11.98           C
ATOM   3854  CZ  PHE B 267      37.831  15.118  73.031  1.00 12.05           C
ATOM   3855  CE2 PHE B 267      38.915  15.073  72.169  1.00 12.75           C
ATOM   3856  CD2 PHE B 267      40.051  14.349  72.519  1.00 13.19           C
ATOM   3857  N   ARG B 268      44.132  12.121  75.680  1.00 17.72           N
ATOM   3858  CA  ARG B 268      45.047  11.207  76.380  1.00 18.48           C
ATOM   3859  C   ARG B 268      45.182  11.529  77.879  1.00 18.44           C
ATOM   3860  O   ARG B 268      45.247  10.630  78.720  1.00 19.38           O
ATOM   3861  CB  ARG B 268      46.434  11.212  75.713  1.00 17.82           C
ATOM   3862  N   GLU B 269      45.217  12.812  78.206  1.00 18.65           N
ATOM   3863  CA  GLU B 269      45.297  13.250  79.597  1.00 18.92           C
ATOM   3864  C   GLU B 269      43.959  13.036  80.322  1.00 18.54           C
ATOM   3865  O   GLU B 269      43.934  12.647  81.497  1.00 18.09           O
ATOM   3866  CB  GLU B 269      45.775  14.704  79.666  1.00 19.47           C
ATOM   3867  CG  GLU B 269      46.966  14.979  78.738  1.00 21.92           C
ATOM   3868  CD  GLU B 269      47.419  16.436  78.690  1.00 24.77           C
ATOM   3869  OE1 GLU B 269      46.571  17.354  78.653  1.00 24.51           O
ATOM   3870  OE2 GLU B 269      48.649  16.667  78.662  1.00 28.26           O
ATOM   3871  N   LEU B 270      42.856  13.257  79.601  1.00 17.64           N
ATOM   3872  CA  LEU B 270      41.514  12.934  80.102  1.00 16.64           C
ATOM   3873  C   LEU B 270      41.332  11.431  80.367  1.00 16.54           C
ATOM   3874  O   LEU B 270      40.745  11.052  81.385  1.00 16.13           O
ATOM   3875  CB  LEU B 270      40.421  13.477  79.167  1.00 15.75           C
ATOM   3876  CG  LEU B 270      40.365  15.011  79.069  1.00 15.92           C
ATOM   3877  CD1 LEU B 270      39.468  15.471  77.940  1.00 14.68           C
ATOM   3878  CD2 LEU B 270      39.927  15.641  80.380  1.00 15.30           C
ATOM   3879  N   ILE B 271      41.844  10.581  79.472  1.00 16.42           N
ATOM   3880  CA  ILE B 271      41.879   9.130  79.728  1.00 16.73           C
ATOM   3881  C   ILE B 271      42.555   8.821  81.078  1.00 17.15           C
ATOM   3882  O   ILE B 271      41.987   8.122  81.918  1.00 17.53           O
ATOM   3883  CB  ILE B 271      42.560   8.346  78.550  1.00 16.37           C
ATOM   3884  CG1 ILE B 271      41.714   8.454  77.273  1.00 16.54           C
ATOM   3885  CD1 ILE B 271      42.422   8.022  75.984  1.00 15.02           C
ATOM   3886  CG2 ILE B 271      42.723   6.872  78.902  1.00 15.63           C
ATOM   3887  N   ILE B 272      43.743   9.384  81.294  1.00 17.68           N
ATOM   3888  CA  ILE B 272      44.536   9.127  82.505  1.00 18.08           C
ATOM   3889  C   ILE B 272      43.816   9.599  83.774  1.00 18.08           C
ATOM   3890  O   ILE B 272      43.737   8.875  84.764  1.00 17.54           O
ATOM   3891  CB  ILE B 272      45.969   9.745  82.360  1.00 18.32           C
ATOM   3892  CG1 ILE B 272      46.789   8.931  81.355  1.00 18.63           C
ATOM   3893  CD1 ILE B 272      47.871   9.740  80.611  1.00 20.26           C
ATOM   3894  CG2 ILE B 272      46.704   9.861  83.716  1.00 17.93           C
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FIG. 5MMM

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ATOM   3895  N   GLU B 273      43.255  10.798  83.715  1.00 18.86           N
ATOM   3896  CA  GLU B 273      42.579  11.397  84.863  1.00 19.99           C
ATOM   3897  C   GLU B 273      41.308  10.631  85.284  1.00 19.72           C
ATOM   3898  O   GLU B 273      41.127  10.307  86.458  1.00 19.89           O
ATOM   3899  CB  GLU B 273      42.278  12.864  84.565  1.00 21.15           C
ATOM   3900  CG  GLU B 273      42.170  13.788  85.775  1.00 25.51           C
ATOM   3901  CD  GLU B 273      43.171  13.489  86.872  1.00 28.87           C
ATOM   3902  OE1 GLU B 273      42.733  13.225  88.011  1.00 31.06           O
ATOM   3903  OE2 GLU B 273      44.390  13.514  86.602  1.00 31.27           O
ATOM   3904  N   PHE B 274      40.452  10.304  84.323  1.00 19.07           N
ATOM   3905  CA  PHE B 274      39.230   9.578  84.632  1.00 18.15           C
ATOM   3906  C   PHE B 274      39.447   8.089  84.965  1.00 18.34           C
ATOM   3907  O   PHE B 274      38.716   7.536  85.782  1.00 17.55           O
ATOM   3908  CB  PHE B 274      38.198   9.779  83.523  1.00 17.98           C
ATOM   3909  CG  PHE B 274      37.449  11.079  83.624  1.00 16.13           C
ATOM   3910  CD1 PHE B 274      36.467  11.258  84.594  1.00 16.35           C
ATOM   3911  CE1 PHE B 274      35.776  12.462  84.696  1.00 16.05           C
ATOM   3912  CZ  PHE B 274      36.068  13.501  83.811  1.00 14.97           C
ATOM   3913  CE2 PHE B 274      37.052  13.333  82.853  1.00 14.62           C
ATOM   3914  CD2 PHE B 274      37.733  12.127  82.761  1.00 15.34           C
ATOM   3915  N   SER B 275      40.443   7.451  84.341  1.00 18.52           N
ATOM   3916  CA  SER B 275      40.821   6.071  84.683  1.00 18.91           C
ATOM   3917  C   SER B 275      41.180   5.949  86.172  1.00 19.17           C
ATOM   3918  O   SER B 275      40.699   5.057  86.866  1.00 18.84           O
ATOM   3919  CB  SER B 275      42.007   5.593  83.832  1.00 19.09           C
ATOM   3920  OG  SER B 275      41.668   5.439  82.463  1.00 19.74           O
ATOM   3921  N   LYS B 276      42.028   6.862  86.636  1.00 19.68           N
ATOM   3922  CA  LYS B 276      42.435   6.973  88.035  1.00 20.80           C
ATOM   3923  C   LYS B 276      41.226   7.129  88.969  1.00 20.51           C
ATOM   3924  O   LYS B 276      41.137   6.472  90.008  1.00 20.41           O
ATOM   3925  CB  LYS B 276      43.400   8.160  88.176  1.00 21.66           C
ATOM   3926  CG  LYS B 276      43.808   8.538  89.595  1.00 24.15           C
ATOM   3927  CD  LYS B 276      45.169   9.248  89.638  1.00 27.89           C
ATOM   3928  CE  LYS B 276      45.520   9.965  88.330  1.00 31.05           C
ATOM   3929  NZ  LYS B 276      44.875  11.319  88.224  1.00 33.09           N
ATOM   3930  N   MET B 277      40.292   7.985  88.572  1.00 20.28           N
ATOM   3931  CA  MET B 277      39.066   8.219  89.333  1.00 19.77           C
ATOM   3932  C   MET B 277      38.148   7.007  89.361  1.00 19.10           C
ATOM   3933  O   MET B 277      37.528   6.717  90.386  1.00 18.35           O
ATOM   3934  CB  MET B 277      38.332   9.430  88.772  1.00 20.05           C
ATOM   3935  CG  MET B 277      39.095  10.718  88.997  1.00 20.14           C
ATOM   3936  SD  MET B 277      38.213  12.164  88.415  1.00 22.55           S
ATOM   3937  CE  MET B 277      39.128  13.416  89.378  1.00 20.86           C
ATOM   3938  N   ALA B 278      38.093   6.297  88.236  1.00 18.93           N
ATOM   3939  CA  ALA B 278      37.301   5.078  88.089  1.00 19.00           C
ATOM   3940  C   ALA B 278      37.819   3.920  88.945  1.00 18.84           C
ATOM   3941  O   ALA B 278      37.104   2.945  89.168  1.00 19.48           O
ATOM   3942  CB  ALA B 278      37.238   4.663  86.626  1.00 19.11           C
ATOM   3943  N   ARG B 279      39.060   4.026  89.413  1.00 18.31           N
ATOM   3944  CA  ARG B 279      39.620   3.043  90.338  1.00 18.31           C
ATOM   3945  C   ARG B 279      39.111   3.272  91.761  1.00 18.15           C
ATOM   3946  O   ARG B 279      39.195   2.389  92.606  1.00 18.96           O
ATOM   3947  CB  ARG B 279      41.146   3.100  90.326  1.00 18.23           C
ATOM   3948  CG  ARG B 279      41.805   2.512  89.079  1.00 17.47           C
ATOM   3949  CD  ARG B 279      43.321   2.406  89.195  1.00 15.59           C
ATOM   3950  N   ASP B 280      38.602   4.468  92.026  1.00 17.90           N
ATOM   3951  CA  ASP B 280      38.070   4.799  93.337  1.00 17.35           C
ATOM   3952  C   ASP B 280      36.833   5.694  93.211  1.00 16.86           C
ATOM   3953  O   ASP B 280      36.835   6.828  93.695  1.00 16.39           O
ATOM   3954  CB  ASP B 280      39.152   5.482  94.168  1.00 17.42           C
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FIG. 5NNN

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ATOM   3955  CG  ASP B 280      38.722   5.721  95.592  1.00 17.58           C
ATOM   3956  OD1 ASP B 280      37.701   5.134  96.018  1.00 16.77           O
ATOM   3957  OD2 ASP B 280      39.342   6.480  96.355  1.00 18.66           O
ATOM   3958  N   PRO B 281      35.776   5.183  92.581  1.00 16.74           N
ATOM   3959  CA  PRO B 281      34.662   6.028  92.132  1.00 17.14           C
ATOM   3960  C   PRO B 281      33.827   6.616  93.269  1.00 17.98           C
ATOM   3961  O   PRO B 281      33.305   7.729  93.113  1.00 17.71           O
ATOM   3962  CB  PRO B 281      33.816   5.071  91.287  1.00 16.17           C
ATOM   3963  CG  PRO B 281      34.076   3.745  91.875  1.00 16.96           C
ATOM   3964  CD  PRO B 281      35.539   3.762  92.263  1.00 17.02           C
ATOM   3965  N   GLN B 282      33.722   5.895  94.387  1.00 18.55           N
ATOM   3966  CA  GLN B 282      32.905   6.345  95.509  1.00 19.76           C
ATOM   3967  C   GLN B 282      33.569   7.462  96.309  1.00 20.19           C
ATOM   3968  O   GLN B 282      32.955   8.031  97.207  1.00 21.77           O
ATOM   3969  CB  GLN B 282      32.492   5.169  96.409  1.00 20.07           C
ATOM   3970  CG  GLN B 282      31.583   4.160  95.701  1.00 21.32           C
ATOM   3971  CD  GLN B 282      31.110   3.038  96.606  1.00 23.46           C
ATOM   3972  OE1 GLN B 282      30.267   3.248  97.469  1.00 23.51           O
ATOM   3973  NE2 GLN B 282      31.642   1.838  96.398  1.00 25.50           N
ATOM   3974  N   ARG B 283      34.814   7.787  95.983  1.00 20.08           N
ATOM   3975  CA  ARG B 283      35.465   8.950  96.575  1.00 20.64           C
ATOM   3976  C   ARG B 283      35.237  10.217  95.720  1.00 20.11           C
ATOM   3977  O   ARG B 283      35.264  11.342  96.236  1.00 19.20           O
ATOM   3978  CB  ARG B 283      36.964   8.685  96.761  1.00 21.20           C
ATOM   3979  CG  ARG B 283      37.812   9.924  96.950  1.00 23.87           C
ATOM   3980  CD  ARG B 283      39.147   9.854  96.258  1.00 29.31           C
ATOM   3981  NE  ARG B 283      39.846  11.142  96.233  1.00 33.72           N
ATOM   3982  CZ  ARG B 283      41.166  11.276  96.354  1.00 35.62           C
ATOM   3983  NH1 ARG B 283      41.935  10.205  96.525  1.00 36.82           N
ATOM   3984  NH2 ARG B 283      41.719  12.482  96.318  1.00 36.16           N
ATOM   3985  N   TYR B 284      35.018  10.025  94.419  1.00 19.02           N
ATOM   3986  CA  TYR B 284      34.991  11.146  93.484  1.00 19.17           C
ATOM   3987  C   TYR B 284      33.587  11.647  93.173  1.00 19.39           C
ATOM   3988  O   TYR B 284      33.400  12.809  92.794  1.00 19.17           O
ATOM   3989  CB  TYR B 284      35.752  10.802  92.209  1.00 18.39           C
ATOM   3990  CG  TYR B 284      37.235  10.810  92.427  1.00 17.96           C
ATOM   3991  CD1 TYR B 284      37.956   9.612  92.544  1.00 17.88           C
ATOM   3992  CE1 TYR B 284      39.335   9.622  92.757  1.00 16.67           C
ATOM   3993  CZ  TYR B 284      39.992  10.841  92.866  1.00 17.31           C
ATOM   3994  OH  TYR B 284      41.346  10.891  93.077  1.00 19.02           O
ATOM   3995  CE2 TYR B 284      39.300  12.031  92.767  1.00 17.06           C
ATOM   3996  CD2 TYR B 284      37.925  12.011  92.552  1.00 17.89           C
ATOM   3997  N   LEU B 285      32.613  10.757  93.342  1.00 19.77           N
ATOM   3998  CA  LEU B 285      31.206  11.088  93.172  1.00 20.32           C
ATOM   3999  C   LEU B 285      30.413  10.630  94.390  1.00 20.52           C
ATOM   4000  O   LEU B 285      30.627   9.535  94.910  1.00 20.32           O
ATOM   4001  CB  LEU B 285      30.644  10.450  91.899  1.00 20.09           C
ATOM   4002  CG  LEU B 285      31.270  10.900  90.577  1.00 20.18           C
ATOM   4003  CD1 LEU B 285      30.599  10.197  89.399  1.00 18.74           C
ATOM   4004  CD2 LEU B 285      31.191  12.425  90.436  1.00 20.43           C
ATOM   4005  N   VAL B 286      29.515  11.491  94.841  1.00 20.74           N
ATOM   4006  CA  VAL B 286      28.710  11.227  96.017  1.00 21.57           C
ATOM   4007  C   VAL B 286      27.299  10.882  95.569  1.00 22.00           C
ATOM   4008  O   VAL B 286      26.532  11.760  95.176  1.00 21.78           O
ATOM   4009  CB  VAL B 286      28.666  12.443  96.979  1.00 21.93           C
ATOM   4010  CG1 VAL B 286      27.971  12.061  98.289  1.00 21.50           C
ATOM   4011  CG2 VAL B 286      30.057  12.981  97.242  1.00 20.81           C
ATOM   4012  N   ILE B 287      26.982   9.592  95.620  1.00 22.91           N
ATOM   4013  CA  ILE B 287      25.682   9.069  95.224  1.00 23.56           C
ATOM   4014  C   ILE B 287      24.978   8.518  96.460  1.00 24.37           C
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FIG. 5OOO

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ATOM   4015  O   ILE B 287      25.566   7.749  97.227  1.00 24.24           O
ATOM   4016  CB  ILE B 287      25.869   7.960  94.163  1.00 23.71           C
ATOM   4017  CG1 ILE B 287      26.848   8.417  93.056  1.00 24.45           C
ATOM   4018  CD1 ILE B 287      26.217   8.809  91.717  1.00 24.37           C
ATOM   4019  CG2 ILE B 287      24.522   7.464  93.640  1.00 22.87           C
ATOM   4020  N   GLN B 288      23.720   8.911  96.649  1.00 25.68           N
ATOM   4021  CA  GLN B 288      22.935   8.519  97.827  1.00 26.67           C
ATOM   4022  C   GLN B 288      22.874   7.005  98.069  1.00 27.26           C
ATOM   4023  O   GLN B 288      23.109   6.543  99.190  1.00 27.59           O
ATOM   4024  CB  GLN B 288      21.513   9.073  97.718  1.00 27.30           C
ATOM   4025  N   GLY B 289      22.561   6.241  97.023  1.00 27.43           N
ATOM   4026  CA  GLY B 289      22.472   4.791  97.119  1.00 27.67           C
ATOM   4027  C   GLY B 289      23.782   4.132  97.516  1.00 27.87           C
ATOM   4028  O   GLY B 289      23.803   2.980  97.949  1.00 28.06           O
ATOM   4029  N   GLU B 290      24.874   4.865  97.323  1.00 27.98           N
ATOM   4030  CA  GLU B 290      26.174   4.533  97.891  1.00 28.19           C
ATOM   4031  C   GLU B 290      26.252   5.344  99.187  1.00 28.28           C
ATOM   4032  O   GLU B 290      25.465   6.261  99.398  1.00 29.39           O
ATOM   4033  CB  GLU B 290      27.291   4.889  96.897  1.00 27.86           C
ATOM   4034  CG  GLU B 290      27.085   4.233  95.529  1.00 27.75           C
ATOM   4035  CD  GLU B 290      27.996   4.741  94.412  1.00 26.76           C
ATOM   4036  OE1 GLU B 290      28.759   5.713  94.598  1.00 27.18           O
ATOM   4037  OE2 GLU B 290      27.949   4.146  93.324  1.00 25.95           O
ATOM   4038  N   GLY B 291      27.145   5.013 100.095  1.00 27.84           N
ATOM   4039  CA  GLY B 291      27.055   5.679 101.387  1.00 27.67           C
ATOM   4040  C   GLY B 291      26.039   5.026 102.317  1.00 26.84           C
ATOM   4041  O   GLY B 291      25.172   4.273 101.886  1.00 26.95           O
ATOM   4042  N   HIS B 292      26.144   5.337 103.600  1.00 26.59           N
ATOM   4043  CA  HIS B 292      25.449   4.590 104.635  1.00 26.57           C
ATOM   4044  C   HIS B 292      24.255   5.332 105.232  1.00 26.85           C
ATOM   4045  O   HIS B 292      24.033   6.512 104.948  1.00 26.45           O
ATOM   4046  CB  HIS B 292      26.446   4.220 105.732  1.00 26.27           C
ATOM   4047  CG  HIS B 292      26.944   5.394 106.514  1.00 25.62           C
ATOM   4048  ND1 HIS B 292      28.228   5.878 106.393  1.00 25.87           N
ATOM   4049  CE1 HIS B 292      28.388   6.908 107.202  1.00 25.43           C
ATOM   4050  NE2 HIS B 292      27.249   7.115 107.839  1.00 26.23           N
ATOM   4051  CD2 HIS B 292      26.331   6.179 107.430  1.00 24.56           C
ATOM   4052  N   HIS B 293      23.503   4.634 106.077  1.00 27.57           N
ATOM   4053  CA  HIS B 293      22.318   5.207 106.718  1.00 28.31           C
ATOM   4054  C   HIS B 293      22.485   5.339 108.237  1.00 28.96           C
ATOM   4055  O   HIS B 293      21.591   4.958 109.012  1.00 28.94           O
ATOM   4056  CB  HIS B 293      21.088   4.357 106.388  1.00 28.43           C
ATOM   4057  N   HIS B 294      23.635   5.875 108.655  1.00 29.44           N
ATOM   4058  CA  HIS B 294      23.952   6.066 110.074  1.00 29.99           C
ATOM   4059  C   HIS B 294      24.705   7.370 110.290  1.00 30.49           C
ATOM   4060  O   HIS B 294      25.869   7.372 110.702  1.00 30.87           O
ATOM   4061  CB  HIS B 294      24.785   4.905 110.612  1.00 29.51           C
ATOM   4062  CG  HIS B 294      24.199   3.559 110.332  1.00 29.56           C
ATOM   4063  ND1 HIS B 294      22.922   3.211 110.715  1.00 28.90           N
ATOM   4064  CE1 HIS B 294      22.675   1.972 110.329  1.00 29.26           C
ATOM   4065  NE2 HIS B 294      23.748   1.502 109.718  1.00 29.18           N
ATOM   4066  CD2 HIS B 294      24.717   2.474 109.708  1.00 28.78           C
ATOM   4067  N   HIS B 295      24.043   8.479 109.992  1.00 30.81           N
ATOM   4068  CA  HIS B 295      24.641   9.786 110.191  1.00 31.27           C
ATOM   4069  C   HIS B 295      24.101  10.403 111.471  1.00 31.79           C
ATOM   4070  O   HIS B 295      22.910  10.723 111.568  1.00 31.64           O
ATOM   4071  CB  HIS B 295      24.382  10.685 108.978  1.00 31.22           C
ATOM   4072  CG  HIS B 295      25.066  10.222 107.731  1.00 30.61           C
ATOM   4073  ND1 HIS B 295      26.382  10.522 107.449  1.00 31.05           N
ATOM   4074  CE1 HIS B 295      26.715   9.979 106.292  1.00 30.84           C
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FIG. 5PPP

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ATOM   4075  NE2 HIS B 295      25.666   9.331 105.818  1.00 30.64           N
ATOM   4076  CD2 HIS B 295      24.623   9.467 106.700  1.00 30.41           C
ATOM   4077  N   HIS B 296      24.986  10.537 112.457  1.00 32.57           N
ATOM   4078  CA  HIS B 296      24.641  11.108 113.755  1.00 33.22           C
ATOM   4079  C   HIS B 296      25.464  12.369 114.009  1.00 33.60           C
ATOM   4080  O   HIS B 296      25.440  13.310 113.205  1.00 33.93           O
ATOM   4081  CB  HIS B 296      24.856  10.087 114.880  1.00 33.38           C
ATOM   4082  CG  HIS B 296      24.010   8.859 114.754  1.00 33.96           C
ATOM   4083  ND1 HIS B 296      24.213   7.914 113.769  1.00 35.11           N
ATOM   4084  CE1 HIS B 296      23.319   6.949 113.897  1.00 35.18           C
ATOM   4085  NE2 HIS B 296      22.541   7.234 114.928  1.00 34.93           N
ATOM   4086  CD2 HIS B 296      22.952   8.424 115.480  1.00 34.60           C
TER    4087      HIS B 296
HETATM 4088  O   HOH W   1      28.998   7.797  96.214  1.00  5.45           O
HETATM 4089  O   HOH W   2      42.694  30.033  78.928  1.00 15.99           O
HETATM 4090  O   HOH W   3      14.284  24.355  -1.705  1.00 31.92           O
HETATM 4091  O   HOH W   4       9.434   2.124  25.854  1.00 12.89           O
HETATM 4092  O   HOH W   5      11.686  18.337  20.467  1.00 19.43           O
HETATM 4093  O   HOH W   6      28.232   0.015  63.543  1.00 23.69           O
HETATM 4094  O   HOH W   7      32.566  18.198  69.464  1.00 16.45           O
HETATM 4095  O   HOH W   8      26.983   7.994 103.693  1.00 28.59           O
HETATM 4096  O   HOH W   9      34.576  20.314  67.899  1.00 13.64           O
HETATM 4097  O   HOH W  10      22.822  24.473  71.792  1.00 14.22           O
HETATM 4098  O   HOH W  11      42.907  16.304  72.715  1.00 17.29           O
HETATM 4099  O   HOH W  12      17.470  20.215  83.374  1.00 14.31           O
HETATM 4100  O   HOH W  13       1.076  16.872  17.542  1.00 17.35           O
HETATM 4101  O   HOH W  14      20.657  17.529  73.818  1.00 14.37           O
HETATM 4102  O   HOH W  15      38.164  24.544  61.487  1.00 25.36           O
HETATM 4103  O   HOH W  16      41.611   2.775  62.349  1.00 16.19           O
HETATM 4104  O   HOH W  17      22.137   2.221  23.260  1.00 20.64           O
HETATM 4105  O   HOH W  18      14.764  24.583  13.369  1.00 10.86           O
HETATM 4106  O   HOH W  19      40.188   2.839  85.624  1.00 27.07           O
HETATM 4107  O   HOH W  20       1.841  30.006  10.579  1.00 21.05           O
HETATM 4108  O   HOH W  21      40.127   2.221  72.748  1.00 28.26           O
HETATM 4109  O   HOH W  22      13.323   6.174  -5.504  1.00 18.62           O
HETATM 4110  O   HOH W  23      34.315   1.583  64.924  1.00 16.89           O
HETATM 4111  O   HOH W  24      21.460   7.245  94.994  1.00 29.64           O
HETATM 4112  O   HOH W  25      -0.062   6.376  21.264  1.00 21.21           O
HETATM 4113  O   HOH W  26      33.676  -4.733  22.767  1.00 25.95           O
HETATM 4114  O   HOH W  27      29.411  25.141  76.288  1.00 12.37           O
HETATM 4115  O   HOH W  28      13.514   0.588  25.186  1.00 22.58           O
HETATM 4116  O   HOH W  29      35.216  16.749  60.751  1.00 34.92           O
HETATM 4117  O   HOH W  30      29.873   0.309  65.863  1.00 22.64           O
HETATM 4118  O   HOH W  31      39.650  17.942  97.058  1.00 14.17           O
HETATM 4119  O   HOH W  32      15.423   0.311  27.412  1.00 29.42           O
HETATM 4120  O   HOH W  33      24.729  15.715  90.114  1.00 16.40           O
HETATM 4121  O   HOH W  34      11.022  23.047  19.968  1.00 28.41           O
HETATM 4122  O   HOH W  35      15.226  26.439  14.982  1.00 10.40           O
HETATM 4123  O   HOH W  36      29.549   7.754  98.929  1.00 31.05           O
HETATM 4124  O   HOH W  37      24.144  13.769 108.784  1.00 19.16           O
HETATM 4125  O   HOH W  38      44.398  22.138  81.434  1.00 22.62           O
HETATM 4126  O   HOH W  39      30.484  26.026  80.696  1.00 16.25           O
HETATM 4127  O   HOH W  40      23.926   2.662  21.574  1.00 38.97           O
HETATM 4128  O   HOH W  41      24.201  23.722  11.877  1.00 22.52           O
HETATM 4129  O   HOH W  42      38.768  14.851  67.829  1.00 18.62           O
HETATM 4130  O   HOH W  43      20.593  10.669 109.434  1.00 25.90           O
HETATM 4131  O   HOH W  44       9.833  38.268  17.805  1.00 40.12           O
HETATM 4132  O   HOH W  45      31.806  15.563  61.831  1.00 38.92           O
HETATM 4133  O   HOH W  46      46.648  15.389  67.532  1.00 45.52           O
HETATM 4134  O   HOH W  47       7.194  26.606   7.278  1.00 24.59           O
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FIG. 5QQQ

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HETATM 4135  O   HOH W  48      32.345   9.389  45.870  1.00 37.43           O
HETATM 4136  O   HOH W  49      34.408  -0.038  92.412  1.00 30.28           O
HETATM 4137  O   HOH W  50      29.018  26.702  74.110  1.00 12.47           O
HETATM 4138  O   HOH W  51      26.345  37.094  83.883  1.00 44.10           O
HETATM 4139  O   HOH W  52      17.751  17.183  85.261  1.00 29.92           O
HETATM 4140  O   HOH W  53       8.300  30.037   4.708  1.00 30.49           O
HETATM 4141  O   HOH W  54       7.052   1.135  -4.627  1.00 50.89           O
HETATM 4142  O   HOH W  55      10.934   5.449  56.316  1.00 59.86           O
HETATM 4143  O   HOH W  56       9.455  20.642  21.947  1.00 16.62           O
HETATM 4144  O   HOH W  57      36.716  27.172  82.502  1.00 28.06           O
HETATM 4145  O   HOH W  58      21.316   4.587  29.057  1.00 19.72           O
HETATM 4146  O   HOH W  59      25.658  12.245  41.218  1.00 37.60           O
HETATM 4147  O   HOH W  60      19.391   9.604  99.993  1.00 34.08           O
HETATM 4148  O   HOH W  61      12.023  36.817  22.931  1.00 30.96           O
HETATM 4149  O   HOH W  62      18.695  36.508   6.780  1.00 42.88           O
HETATM 4150  O   HOH W  63      29.545  25.882  90.977  1.00 26.81           O
HETATM 4151  O   HOH W  64      22.863  13.391  21.494  1.00 34.76           O
HETATM 4152  O   HOH W  65       2.066   3.306  28.674  1.00 25.12           O
HETATM 4153  O   HOH W  66      21.290  17.351  78.158  1.00 22.87           O
HETATM 4154  O   HOH W  67      17.483   6.317  73.617  1.00 28.08           O
HETATM 4155  O   HOH W  68      32.056   1.581  48.187  1.00 34.21           O
HETATM 4156  O   HOH W  69      27.862  18.784  70.341  1.00 18.12           O
HETATM 4157  O   HOH W  70      16.168  15.234  27.154  1.00 18.67           O
HETATM 4158  O   HOH W  71      27.548  -1.447  15.790  1.00 28.43           O
HETATM 4159  O   HOH W  72      -3.252   8.681  19.344  1.00 28.54           O
HETATM 4160  O   HOH W  73      21.775  24.157  17.335  1.00 31.82           O
HETATM 4161  O   HOH W  74      32.097  -6.189  21.261  1.00 36.61           O
HETATM 4162  O   HOH W  75       5.334  15.234  22.514  1.00 22.29           O
HETATM 4163  O   HOH W  76      26.436  16.890  13.243  1.00 46.48           O
HETATM 4164  O   HOH W  77      26.507   8.991  99.475  1.00 28.94           O
HETATM 4165  O   HOH W  78      13.365  25.042   8.721  1.00 29.68           O
HETATM 4166  O   HOH W  79      -2.835  16.211  22.213  1.00 42.69           O
HETATM 4167  O   HOH W  80      -0.806  13.507  17.668  1.00 18.89           O
HETATM 4168  O   HOH W  81      -2.772   7.883  14.041  1.00 36.25           O
HETATM 4169  O   HOH W  82      14.336  -0.374  52.681  1.00 29.69           O
HETATM 4170  O   HOH W  83      30.767  13.361  30.094  1.00 32.30           O
HETATM 4171  O   HOH W  84      24.728  15.959 112.079  1.00 15.48           O
HETATM 4172  O   HOH W  85      18.585   5.073  76.156  1.00 20.77           O
HETATM 4173  O   HOH W  86      12.087   6.987  28.731  1.00 16.34           O
HETATM 4174  O   HOH W  87      22.672   3.132  47.075  1.00 25.24           O
HETATM 4175  O   HOH W  88      13.707  29.144   2.429  1.00 47.19           O
HETATM 4176  O   HOH W  89      22.063  15.088  91.588  1.00 31.79           O
HETATM 4177  O   HOH W  90       1.459   6.344  18.792  1.00 27.32           O
HETATM 4178  O   HOH W  91      22.534  16.855  11.275  1.00 15.54           O
HETATM 4179  O   HOH W  92      30.290   7.211  65.189  1.00 34.30           O
HETATM 4180  O   HOH W  93      40.141  30.593  80.818  1.00 26.41           O
HETATM 4181  O   HOH W  94      24.536  -1.198 108.080  1.00 42.66           O
HETATM 4182  O   HOH W  95      20.853  15.313  15.256  1.00 18.03           O
HETATM 4183  O   HOH W  96      44.683  13.196  72.750  1.00 24.69           O
HETATM 4184  O   HOH W  97      11.740   1.454  42.593  1.00 45.99           O
HETATM 4185  O   HOH W  98      39.581  13.869  96.751  1.00 30.88           O
HETATM 4186  O   HOH W  99      29.670   2.495  92.023  1.00 25.37           O
HETATM 4187  O   HOH W 100      20.178  12.119  64.978  1.00 28.53           O
HETATM 4188  O   HOH W 101       9.026   2.563  69.045  1.00 36.54           O
HETATM 4189  O   HOH W 102       4.213  30.389   9.007  1.00 24.44           O
HETATM 4190  O   HOH W 103      19.707  24.186  77.524  1.00 18.74           O
HETATM 4191  O   HOH W 104      28.504  18.843  96.342  1.00 34.10           O
HETATM 4192  O   HOH W 105      28.044   9.665  20.495  1.00 50.29           O
HETATM 4193  O   HOH W 106      41.926   5.529  72.212  1.00 34.69           O
HETATM 4194  O   HOH W 107      22.321  10.701  67.907  1.00 32.90           O
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FIG. 5RRR

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HETATM 4195  O   HOH W 108      15.633  22.526  83.643  1.00 23.10           O
HETATM 4196  O   HOH W 109      23.131  15.975  74.461  1.00 21.55           O
HETATM 4197  O   HOH W 110      20.206  -1.361   3.237  1.00 24.94           O
HETATM 4198  O   HOH W 111      25.315   4.505  14.304  1.00 25.25           O
HETATM 4199  O   HOH W 112      11.883  15.625  28.119  1.00 39.37           O
HETATM 4200  O   HOH W 113      18.166  32.386  17.278  1.00 24.17           O
HETATM 4201  O   HOH W 114      -2.720  14.293  24.689  1.00 30.63           O
HETATM 4202  O   HOH W 115      37.824  15.970  60.577  1.00 33.16           O
HETATM 4203  O   HOH W 116      48.148  29.585  73.317  1.00 29.82           O
HETATM 4204  O   HOH W 117      27.520  13.412  42.579  1.00 31.21           O
HETATM 4205  O   HOH W 118      15.247  11.867  76.998  1.00 18.28           O
HETATM 4206  O   HOH W 119      40.508  24.823  69.040  1.00 22.36           O
HETATM 4207  O   HOH W 120      30.616  39.569  77.139  1.00 37.78           O
HETATM 4208  O   HOH W 121      24.291  11.180  25.560  1.00 30.20           O
HETATM 4209  O   HOH W 122       4.042  25.207  20.826  1.00 22.39           O
HETATM 4210  O   HOH W 123      29.792  14.975  63.464  1.00 26.82           O
HETATM 4211  O   HOH W 124      21.491   3.300  43.251  1.00 29.55           O
HETATM 4212  O   HOH W 125      -2.406   5.673   5.899  1.00 40.95           O
HETATM 4213  O   HOH W 126      41.952   0.853  64.026  1.00 39.40           O
HETATM 4214  O   HOH W 127      26.223  32.496  71.464  1.00 20.59           O
HETATM 4215  O   HOH W 128      41.042  17.410  89.676  1.00 22.01           O
HETATM 4216  O   HOH W 129      16.372  13.385  48.181  1.00 26.56           O
HETATM 4217  O   HOH W 130      11.751  -0.808   7.821  1.00 34.38           O
HETATM 4218  O   HOH W 131      16.558  15.676  34.571  1.00 27.55           O
HETATM 4219  O   HOH W 132      23.715  -1.482   0.235  1.00 25.41           O
HETATM 4220  O   HOH W 133      26.293  12.543  37.315  1.00 31.89           O
HETATM 4221  O   HOH W 134      14.899   3.023  -3.088  1.00 34.89           O
HETATM 4222  O   HOH W 135      26.593 -11.074  49.839  1.00 39.76           O
HETATM 4223  O   HOH W 136      15.743  30.206  24.249  1.00 31.35           O
HETATM 4224  O   HOH W 137      42.127  14.189  92.996  1.00 31.84           O
HETATM 4225  O   HOH W 138      29.099   8.319  61.777  1.00 34.30           O
HETATM 4226  O   HOH W 139      17.387  15.237  55.947  1.00 37.57           O
HETATM 4227  O   HOH W 140      39.225  28.436  85.846  1.00 37.70           O
HETATM 4228  O   HOH W 141      18.972  32.465  70.632  1.00 35.06           O
HETATM 4229  O   HOH W 142      17.480  17.370  27.959  1.00 42.72           O
HETATM 4230  O   HOH W 143      17.684  35.863  15.728  1.00 40.59           O
HETATM 4231  O   HOH W 144      33.135  22.579  69.723  1.00 34.19           O
HETATM 4232  O   HOH W 145      19.206  21.593  75.835  1.00 39.22           O
HETATM 4233  O   HOH W 146      22.243   7.202  91.152  1.00 38.82           O
HETATM 4234  O   HOH W 147      24.911  14.181  43.275  1.00 41.58           O
HETATM 4235  O   HOH W 148      22.856 -12.981  28.140  1.00 39.84           O
HETATM 4236  O   HOH W 149      22.202  -8.821  40.526  1.00 40.27           O
HETATM 4237  O   HOH W 150      21.291  37.012  72.400  1.00 43.51           O
HETATM 4238  O   HOH W 151      22.094 -11.920  56.697  1.00 36.84           O
HETATM 4239  O   HOH W 152      13.637  16.495  29.478  1.00 40.50           O
HETATM 4240  O   HOH W 153      21.255  21.183  48.853  1.00 42.81           O
HETATM 4241  O   HOH W 154      41.602  15.939  96.547  1.00 34.07           O
HETATM 4242  O   HOH W 155      23.933  13.479  26.357  1.00 43.11           O
HETATM 4243  O   HOH W 156      18.066   2.265  -8.683  1.00 41.94           O
HETATM 4244  O   HOH W 157       1.561  20.646  25.469  1.00 41.00           O
HETATM 4245  O   HOH W 158      25.489  32.498  17.399  1.00 36.46           O
HETATM 4246  O   HOH W 159      14.812  -6.860  22.670  1.00 36.94           O
HETATM 4247  O   HOH W 160      16.597  18.943  19.645  1.00 34.23           O
HETATM 4248  O   HOH W 161      17.808   4.769  51.095  1.00 41.29           O
END
```
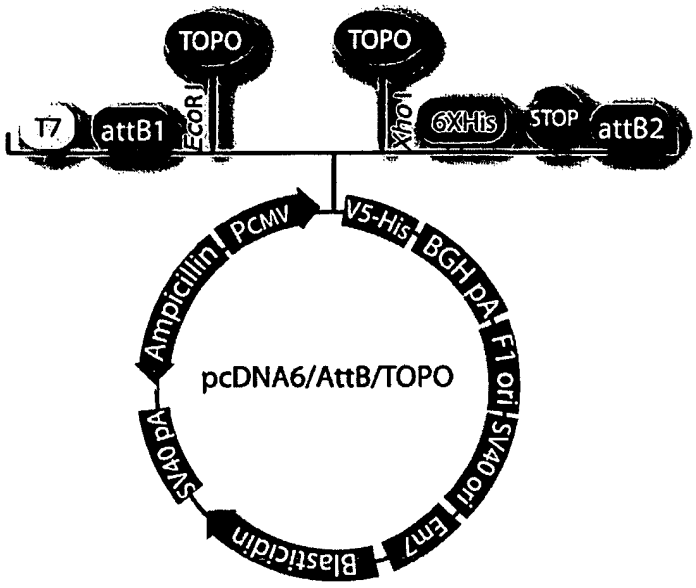

FIG. 5SSS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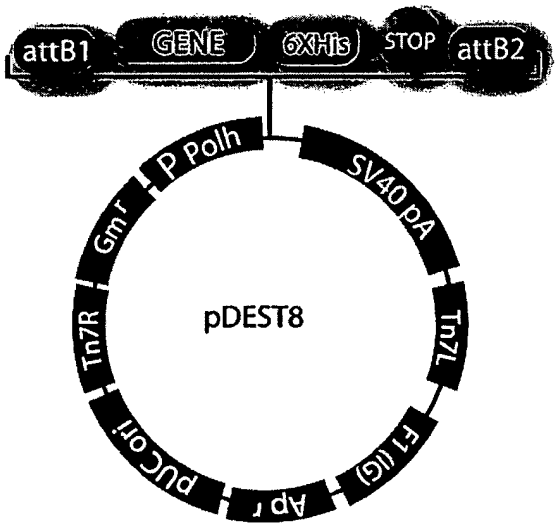
attB1
EcoR I
Xho I
6XHis
STOP
attB2
Ampicillin
PCMV
V5-His
BGH pA
F1 ori
SV40 ori
Em7
Blasticidin
SV40 pA
pcDNA6/AttB/TOPO

FIG. 6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GENE
6XHis
STOP
attB2
P Polh
SV40 pA
Gm r
Tn7L
Tn7R
F1 (G)
Ap r
pUC ori
pDEST8

FIG. 7